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Art Unit: 1626

Thursday, July 22, 2004

Case Serial Number: 09/748006

From: Noble Jarrell

Location: Biotech-Chem Library

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Noble.jarrell@uspto.gov

Search Notes		



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Scientific and Technical Information Conta

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APPENDIX I:

THE LISTING OF CLAIMS (version with markings):

 (currently amended) A 3-heterocyclyl-substituted benzoyl compound of formula I

where the variables have the following meanings:

- R^1 , R^2 are hydrogen, nitro, halogen, cyano, C_1 - C_6 -alkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -haloalkoxy, C_1 - C_6 -alkylthio, C_1 - C_6 -haloalkylthio, C_1 - C_6 -alkylsulfinyl, C_1 - C_6 -haloalkylsulfinyl, C_1 - C_6 -alkylsulfonyl or C_1 - C_6 -haloalkylsulfonyl;
- R^3 is hydrogen, halogen or C_1-C_6 -alkyl;
- R^4 , R^5 are hydrogen, halogen, cyano, nitro, C_1-C_4 -alkyl, $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $di(C_1-C_4-alkoxy)-C_1-C_4-alkyl$, $di(C_1-C_4-alkyl)-amino-C_1-C_4-alkyl$, [2,2-di(C₁-C₄-alkyl)-1-hy $drazino]-C_1-C_4-alkyl,$ C_1-C_6 -alkyliminooxy- C_1-C_4 -alkyl, $C_1-C_4-alkoxycarbonyl-C_1-C_4-alkyl$, $C_1-C_4-alkylthio-C_1-C_4-alkyl$, C_1-C_4 -haloalkyl, C_1-C_4 -cyanoalkyl, C_3-C_8 -cycloalkyl, $C_1-C_4-alkoxy$, $C_1-C_4-alkoxy-C_2-C_4-alkoxy$, $C_1-C_4-haloalkoxy$, hydroxyl, C₁-C₄-alkylcarbonyloxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio, $di(C_1-C_4-alkyl)$ amino, COR^6 , phenyl or benzyl, it being possible for the two last-mentioned substituents to be fully or partially halogenated and/or to have attached to them one to three of the following groups: nitro, cyano, $C_1-C_4-alkyl$, $C_1-C_4-haloalkyl$, $C_1-C_4-alkoxy$ or $C_1-C_4-haloalkoxy$;
- R^4 and R^5 together form a C_2 - C_6 -alkanediyl chain which can be mono- to tetrasubstituted by C_1 - C_4 -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C_1 - C_4 -alkyl; or
- R⁴ and R⁵ together with the corresponding carbon form a carbonyl or thiocarbonyl group;
- R⁶ is hydrogen, C_1-C_4 -alkyl, C_1-C_4 -haloalkyl, C_1-C_4 -alkoxy, C_1-C_4 -alkoxy- C_2-C_4 -alkoxy, C_1-C_4 -haloalkoxy, C_3-C_6 -alkenyloxy, C_3-C_6 -alkynyloxy or NR⁷R⁸;

 R^7 is hydrogen or C_1-C_4 -alkyl;

 R^8 is C_1-C_4 -alkyl;

X is 0, S, NR^9 , CO or $CR^{10}R^{11}$;

Y is O, S, NR¹² or CO;

 R^9 , R^{12} are hydrogen or C_1-C_4 -alkyl;

- R^{10} , R^{11} are hydrogen, C_1-C_4 -alkyl, C_1-C_4 -haloalkyl, C_1-C_4 -alkoxy-carbonyl, C_1-C_4 -haloalkoxycarbonyl or $CONR^7R^8$; or
- R^4 and R^9 or R^4 and R^{10} or R^5 and R^{12} together form a C_2 - C_6 -alkanediyl chain which can be monot to tetrasubstituted by C_1 - C_4 -alkyl and/or interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C_1 - C_4 -alkyl;
- ${\bf R}^{15}$ is a pyrazole of the formula II which is linked in the 4-position

where

 R^{16} is C_1-C_6 -alkyl;

Z is $[Hor] SO_2R^{17}$;

 R^{17} is C_1-C_4 -alkyl, C_1-C_4 -haloalkyl, phenyl or phenyl which is partially or fully halogenated and/or has attached to it one to three of the following groups: nitro, cyano, C_1-C_4 -alkyl, C_1-C_4 -haloalkyl, C_1-C_4 -alkoxy or C_1-C_4 -haloalkyl, C_1 - C_4 -haloalkyl, C_1 - C_4 -alkoxy;

 R^{18} is hydrogen or c_1-C_6 -alkyl;

where X and Y are not simultaneously sulfur;

[with the exception of]

[4-{2-ohloro-3-(4,5-dihydrothiazol-2-yl)-4-methylsulfonylbenzoyl}-1,3-di-methyl-5-hydroxy-1H-pyrazole-and]

[4-[2-chloro-3-(thiazoline-4,5-dione-2-yl)-4-methylsulfonylbenso-

yl]-1,3-dimethyl-5-hydroxy-1H-pyrazole;

or an agriculturally useful salt thereof.

2. (currently amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1, where the variables have the following meanings:

- R¹, R² are hydrogen, nitro, halogen, cyano, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₆-alkylthio, C₁-C₆-haloalkylthio, C₁-C₆-alkylsulfinyl, C₁-C₆-haloalkylsulfinyl, C₁-C₆-haloalkylsulfonyl;
- R^3 is hydrogen, halogen or C_1-C_6 -alkyl;
- R^4 , R^5 hydrogen, halogen, cyano, nitro, C1-C4-alkyl, are $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $di(C_1-C_4-alkoxy)-C_1-C_4-alkyl,$ $di(C_1-C_4-alkyl)-amino-C_1-C_4-alkyl$, [2,2-di(C₁-C₄-alkyl)-1-hy $drazino]-C_1-C_4-alkyl,$ $C_1-C_6-alkyliminooxy-C_1-C_4-alkyl$, $C_1-C_4-alkoxycarbonyl-C_1-C_4-alkyl$, $C_1-C_4-alkyl$ thio- $C_1-C_4-alkyl$, C_1-C_4 -haloalkyl, C_1-C_4 -cyanoalkyl, C_3-C_8 -cycloalkyl, $C_1-C_4-alkoxy$, $C_1-C_4-alkoxy-C_2-C_4-alkoxy$, C_1-C_4 -haloalkoxy, C_1-C_4 -alkylthio, C_1-C_4 -haloalkylthio, $di(C_1-C_4$ -alkyl)amino, COR6, phenyl or benzyl, it being possible for the two lastmentioned substituents to be fully or partially halogenated and/or to have attached to them one to three of the following nitro, groups: cyano, $C_1-C_4-alkyl$, C_1-C_4 -haloalkyl, C_1-C_4 -alkoxy or C_1-C_4 -haloalkoxy; or
- R^4 and R^5 together form a C_2 - C_6 -alkanediyl chain which can be mono- to tetrasubstituted by C_1 - C_4 -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C_1 - C_4 -alkyl; or
- R⁴ and R⁵ together with the corresponding carbon form a carbonyl or thiocarbonyl group;
- R⁶ is C_1 - C_4 -alkyl, C_1 - C_4 -haloalkyl, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxy- C_2 - C_4 -alkoxy, C_1 - C_4 -haloalkoxy, C_3 - C_6 -alkenyloxy, C_3 - C_6 -alkynyloxy or NR^7R^8 ;
- R^7 is hydrogen or C_1-C_4 -alkyl;
- R^8 is C_1-C_4 -alkyl;
- X is O, S, NR^9 , CO or $CR^{10}R^{11}$;
- Y is 0, S, NR¹² or CO;
- R^9 , R^{12} are hydrogen or C_1-C_4 -alkyl;
- R^{10} , R^{11} are hydrogen, C_1-C_4 -alkyl, C_1-C_4 -haloalkyl, C_1-C_4 -alkoxycarbonyl, C_1-C_4 -haloalkoxycarbonyl or $CONR^7R^8$; or
- R^4 and R^9 or R^4 and R^{10} or R^5 and R^{12} together form a C_2 - C_6 -alkanediyl chain which can be monot to tetrasubstituted by C_1 - C_4 -alkyl and/or interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C_1 - C_4 -alkyl;

 R^{15} is a pyrazole of the formula II which is linked in the 4-position

where

 R^{16} is C_1-C_6 -alkyl;

Z is [H-or] SO₂R¹⁷;

R¹⁷ is C₁-C₄-alkyl, C₁-C₄-haloalkyl, phenyl or phenyl which is partially or fully halogenated and/or has attached to it one to three of the following groups: nitro, cyano, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy or C₁-C₄-haloalkoxy;

 R^{18} is hydrogen or c_1-C_6 -alkyl;

where X and Y are not simultaneously sulfur;

[with the exception of]

[4-{2-chloro-3-(4,5-dihydrothiazol-2-yl)-4-methylsulfonylbenzoyl]-1,3-di-methyl 5-hydroxy-1H-pyrazole-and]

[4-{2-chloro-3-(thiazoline-4,5-dione-2-yl)-4-methylsulfonylbenzo-yl]-1,3-dimethyl-5-hydroxy-lH-pyrazolo;]

or an agriculturally useful salt thereof.

- 3. (previously presented) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where R³ is hydrogen.
- 4. (previously presented) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
 - R^1 , R^2 are nitro, halogen, cyano, C_1 - C_6 -alkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -haloalkoxy, C_1 - C_6 -alkylthio, C_1 - C_6 -haloalkylsulfinyl, C_1 - C_6 -haloalkylsulfinyl, C_1 - C_6 -alkylsulfonyl or C_1 - C_6 -haloalkylsulfonyl.
- 5. (canceled)
- 6. (canceled)
- 7. (canceled)
- 8. (previously presented) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where



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Preparation examples:

5 4-[2-Chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl-benzoyl]-5-hydroxy-1-methyl-1H-pyrazole (compound 3.35)

43.60 g (0.13 mol) of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl chloride in 375 ml of anhydrous 10 dioxane and 13.56 g (0.134 mol) of triethylamine in 375 ml of anhydrous dioxane are simultanouesly added dropwise at room temperature under a protective gas atmosphere to a solution 12.74 g (0.13 mol) of 5-hydroxy-1-methylpyrazole and 300 ml of anhydrous dioxane. After the reaction mixture had been stirred 15 for 2 hours at room temperature, it was filtered through silica gel and the residue was washed with dioxane. The eluate was concentrated in vacuo to approxmately 500 ml, and 17.94 g (0.13 mol) of dried, finely powdered potassium carbonate were added. After the mixture had been refluxed for 6 hours, the 20 solvent was distilled off in vacuo and the residue was taken up in approximately 700 ml of water. Insoluble constituents were filtered off, and the pH of the filtrate was brought to 2 - 3 by slow addition of 10% strength hydrochloric acid. The precipitate which formed was filtered off with suction. This gave 46.16 g 25 (92% of theory) of 4-[2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl]-5-hydroxy-1-methyl-1H-pyrazole. (m.p. > 250°C)

Table 3 shows the above compound and, in addition, other

30 3-heterocyclyl-substituted benzoyl derivatives of the formula I which were prepared, or can be prepared, in a similar manner (if the end products had not precipitated upon acidification with 10% strength hydrochloric acid, they were extracted with ethyl acetate or dichloromethane; the organic phase was subsequently

35 dried and concentrated in vacuo):

40



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BIBDATASHEET

Bib Data Sheet

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APPLICANTS					
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** FOREIGN APPLICATIONS ************************************					
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 04/10/2001					
Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and Acknowledged Exa	☐ yes ☐ no ☐ Met after Allo	STATE O	R SHEETS	TOTAL	INDEPENDENT
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- AN 1998:509195 HCAPLUS
- DN 129:136166
- ED Entered STN: 17 Aug 1998
- TI Preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides.
- IN Von Deyn, Wolfgang; Hill, Regina Luise; Baumann, Ernst; Engel, Stefan; Mayer, Guido; Rheinheimer, Joachim; Witschel, Matthias; Misslitz, Ulf; Wagner, Oliver; Otten, Martina; Walter, Helmut; Westphalen, Karl-Otto
- PA BASF A.-G., Germany
- SO PCT Int. Appl., 393 pp. CODEN: PIXXD2
- DT Patent
- LA German
- IC ICM C07D413-10 ICS A01N043-72; A01N043-48; C07D417-10; C07D409-10; C07D405-10;

CO7D401-10; CO7D403-10; CO7D411-10; CO7D231-20; CO7D231-24 CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom)) FAN.CNT 3

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
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	KR, KZ,	LT, LV, MX, NO,	NZ, PL, RO, RU, SG, SI,	SK, TJ, TM, TR,
	UA, US,	UZ, VN, AM, AZ,	BY, KG, KZ, MD, RU, TJ,	TM
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	DE 1997-1974049	4 A 19970915		•
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GI				

$$R^{5}$$
 R^{2}
 R^{3}

Ι

Title compds. [I; R1, R3 = H, NO2, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, aminosulfonyl, N-alkylaminosulfonyl, N,N-dialkylaminosulfonyl, N-alkylsulfonylamino, N-haloalkylsulfonylamino, N-alkyl-N-alkylsulfonylamino or N-alkyl-N-haloalkylsulfonylamino; R2 = (substituted) 5-6 membered heterocyclyl containing 1-4 heteroatoms selected from O, S, N; R4 = H, halo, alkyl; R5 = substituted pyrazol-4-yl], were prepared as herbicides (no data). Thus, Me 2-chloro-3-hydroxyiminomethyl-4-methylsulfonylbenzoate (preparation given) in CH2Cl2 was treated with ethylene, NaOAc, and aqueous NaOCl to give 90% Me 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoate. This was converted to the acid chloride, which was coupled with 5-hydroxy-1-methylpyrazole in dioxane/Et3N to give 92% 4-[2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl]-5-hydroxy-1-methyl-1H-pyrazole.

ST heterocyclylbenzoylpyrazole prepn herbicide; pyrazole heterocyclylbenzoyl prepn herbicide

IT Herbicides

(preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)

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         (preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)
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     (Reactant or reagent)
        (preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)
RE.CNT
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Basf Aktiengesellschaft; WO 9626206 A 1996 HCAPLUS
(2) Nissan Chemical Industries Ltd; GB 2122188 A 1984 HCAPLUS
(3) Nissan Chemical Industries Ltd; EP 0203428 A 1986 HCAPLUS
(4) Toshiaki, Y; US 4460597 A 1984 HCAPLUS
     ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
     1998:509194 HCAPLUS
     129:136165
     Entered STN: 17 Aug 1998
     Preparation of heterocyclylbenzoylpyrazoles and related compounds as
     herbicides.
     Von Deyn, Wolfgang; Hill, Regina Luise; Kardorff, Uwe; Baumann, Ernst;
     Engel, Stefan; Mayer, Guido; Witschel, Matthias; Rack, Michael; Gotz,
     Norbert; Gebhardt, Joachim; Misslitz, Ulf; Walter, Helmut; Westphalen,
     Karl-Otto; Otten, Martina; Rheinheimer, Joachim; et al.
     BASF A.-G., Germany
     PCT Int. Appl., 173 pp.
     CODEN: PIXXD2
     Patent
     German
     ICM
         C07D413-10
          A01N043-72; C07D498-10; C07D417-10; C07D261-04; C07D291-04;
          C07D273-00; C07D263-10; C07D261-20; C07D277-10; C07D277-34;
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     Section cross-reference(s): 5
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Title compds. [I; R1, R2 = H, NO2, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl; R3 = H, halo, alkyl; R4, R5 = H, halo, cyano, NO2, alkyl, alkoxyalkyl, dialkoxyalkyl, dialkylaminoalkyl, (substituted), Ph, PhCH2, etc.; R4R5 = O, S; X = O, S, NR9, CO, CR10R11; R4R9 or R4R10 or R5R12 or R5R13 = (substituted) (interrupted) alkylene; Y = O, S, NR12, CO, CR13R14; R9, R12 = H, alkyl; R10-R14 = H, alkyl, haloalkyl, alkoxycarbonyl, haloalkoxycarbonyl, CONR7R8; R15 = substituted 4-pyrazolyl], were prepared as herbicides and plant growth regulators (no data). Thus, 5-hydroxy-1-methylpyrazole in dioxane was treated with 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl chloride (preparation given) in dioxane and with Et3N in dioxane followed by 2 h stirring to give 92% 4-[2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl]-5-hydroxy-1-methyl-1H-pyrazole.

ST heterocyclylbenzoylpyrazozle prepn herbicide; pyrazole heterocyclylbenzoyl prepn herbicide

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        herbicides)
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     2-Methoxy-1-propene
     5-Hydroxy-1-methylpyrazole
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                                               82961-52-2
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     (Reactant or reagent)
        (preparation of heterocyclylbenzoylpyrazoles and related compds. as
        herbicides)
RE.CNT
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Basf Aq; WO 9626206 A 1996 HCAPLUS
(2) Nissan Chemical Ind Ltd; EP 0203428 A 1986 HCAPLUS
(3) Sankyo Co; DE 2513750 A 1975 HCAPLUS
(4) Sankyo Co; FR 2316235 A 1977 HCAPLUS
     ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
L1
     1998:509191 HCAPLUS
AN
DN
     129:122657
     Entered STN: 17 Aug 1998
ED
     Preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-
     methylsulfonylbenzoic acids and related compounds.
     Rheinheimer, Joachim; Von Deyn, Wolfgang; Gebhardt, Joachim; Hill, Regina
IN
     Luise; Rack, Michael; Konig, Hartmann; Gotz, Norbert; Maywald, Volker;
     Kardorff, Uwe
PΑ
     BASF A.-G., Germany
SO
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
IC
     ICM C07D261-04
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ICS C07D261-20
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
FAN.CNT 3
                                            APPLICATION NO.
                                                              DATE
                      KIND
                             DATE
     PATENT NO.
ΡI
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$$R^4$$
 R^3
 R^2
 R^2

AΒ Title compds. [I; n = 0-2; R1 = alkyl, haloalkyl; R2-R4 = H, alkyl, haloalkyl; R3R4 = (alkyl-substituted) alkylene] were prepared by treatment of thioethers (II; R1-R4 as above; X = H) with a brominating agent to give II (R1-R4 as above; X = Br) followed by treatment with a Grignard reagent and CO2 followed by optional oxidation Thus, 3-(2-chloro-6-methylthiophenyl)-4,5-dihydroisoxazole in H2SO4 was treated with Br2 to give 82.6% 3-(3-bromo-2-chloro-6-methylthiophenyl)-4,5-dihydroisoxazole. in THF was treated with Me2CHMgBr and then with dry ice to give 68% 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylthiobenzoic acid. HOAc was treated with Na2WO4 and H2O2 to give 90.9% 2-chloro-3-(4,5dihydroisoxazol-3-yl)-4-methylsulfonylbenzoic acid. chlorodihydroisoxazolmethylsulfonylbenzoate prepn;

ST isoxazolylmethylsulfonylbenzoate chloro dihydro prepn

ITCarboxylation

os

GI

(carboxylation of 3-(3-bromo-2-chloro-6-methylthiophenyl)-4,5dihydroisoxazole with Grignard reagents and carbon dioxide; preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoic acids and related compds.)

210405-98-4P IT

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic

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preparation); PREP (Preparation); RACT (Reactant or reagent)
        (preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-
        methylsulfonylbenzoic acids and related compds.)
     210405-99-5P
IT
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
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        (preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-
        methylsulfonylbenzoic acids and related compds.)
     83-38-5, 2,6-Dichlorobenzaldehyde
                                         5188-07-8, Sodium thiomethoxide
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-
        methylsulfonylbenzoic acids and related compds.)
                   201987-39-5P, 2-Chloro-6-methylthiobenzaldehyde
IT
     25185-95-9P
     210405-94-0P, 2-Chloro-6-methylthiobenzaldoxime
                                                       210405-95-1P
     210405-96-2P
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-
        methylsulfonylbenzoic acids and related compds.)
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Basf Ag; WO 9626200 A 1996 HCAPLUS
(2) Basf Ag; WO 9626206 A 1996 HCAPLUS
(3) Pfizer Inc; WO 9514680 A 1995 HCAPLUS
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                                200446
                                              <200446/DW>
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>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
    http://thomsonderwent.com/coverage/latestupdates/
                                                                 <<<
>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
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                                                                 <<<
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    DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
    FIRST VIEW - FILE WPIFV.
    FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv
>>> THE DISPLAY LAYOUT HAS BEEN CHANGED TO ACCOMODATE THE
    NEW FORMAT GERMAN PATENT APPLICATION AND PUBLICATION
    NUMBERS. SEE ALSO:
    http://www.stn-international.de/archive/stnews/news0104.pdf <<
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ANSWER 1 OF 1 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
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     1998-414023 [35]
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AN
     1998-414024 [35]; 1998-437031 [37]
CR
DNC
    C1998-124974
     New heterocyclyl benzoyl substituted pyrazole derivatives - useful as
ΤI
     herbicides, especially for selective weed and weed grass control in crops,
     e.g. wheat, rice, soya and cotton.
DC
     BAUMANN, E; ENGEL, S; GEBHARDT, J; GOTZ, N; HILL, R L; KARDORFF, U; MAYER,
IN
     G; MISSLITZ, U; OTTEN, M; RACK, M; RHEINHEIMER, J; VON DEYN, W; WALTER, H;
     WESTPHALEN, K; WITSCHEL, M; GOETZ, N; WAGNER, O; KOENIG, H; MAYWALD, V;
     MISSLITS, U; DEYN, W V; MIBLITZ, U
     (BADI) BASF AG; (BAUM-I) BAUMANN E; (DEYN-I) DEYN W V; (ENGE-I) ENGEL S;
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     U; (MAYE-I) MAYER G; (MIBL-I) MIBLITZ U; (OTTE-I) OTTEN M; (RACK-I) RACK
     M; (RHEI-I) RHEINHEIMER J; (WALT-I) WALTER H; (WEST-I) WESTPHALEN K;
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                     A1 20020228 (200220)
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    WO 9831681 A1 WO 1998-EP69 19980108; AU 9860929 A AU 1998-60929 19980108;
     ZA 9800362 A ZA 1998-362 19980116; NO 9903521 A WO 1998-EP69 19980108, NO
     1999-3521 19990716; EP 958291 A1 EP 1998-905274 19980108, WO 1998-EP69
     19980108; SK 9900903 A3 WO 1998-EP69 19980108, SK 1999-903 19980108; CZ
     9902523 A3 WO 1998-EP69 19980108, CZ 1999-2523 19980108; CZ 9902522 A3 WO
     1998-EP70 19980108, CZ 1999-2522 19980108; BR 9806917 A BR 1998-6917
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     9806778 A BR 1998-6778 19980108, WO 1998-EP69 19980108; CN 1250447 A CN
     1998-802992 19980108; US 6124469 A WO 1998-EP66 19980108, US 1999-341519
     19990713; HU 2000001493 A2 WO 1998-EP69 19980108, HU 2000-1493 19980108;
    MX 9906602 A1 MX 1999-6602 19990715; KR 2000070236 A WO 1998-EP69
     19980108, KR 1999-706463 19990716; JP 2001508075 W JP 1998-533617
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     WO 1998-EP69 19980108; NZ 336992 A NZ 1998-336992 19980108, WO 1998-EP69
     19980108; AU 2001091395 A Div ex AU 1998-60929 19980108, AU 2001-91395
     20011116; US 2002025910 A1 Cont of US 1998-91300 19980616, US 2000-748006
     20001227; NO 313914 B1 WO 1998-EP69 19980108, NO 1999-3521 19990716; TW
     505640 A TW 1998-100502 19980115
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     9902523 A3 Based on WO 9831681; CZ 9902522 A3 Based on WO 9831682; BR
     9806917 A Based on WO 9831682; BR 9806778 A Based on WO 9831681; US
     6124469 A Based on WO 9831676; HU 2000001493 A2 Based on WO 9831681; KR
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     2001508458 W Based on WO 9831681; NZ 336992 A Based on WO 9831681; NO
     313914 B1 Previous Publ. NO 9903521
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     DE 1997-19709118
                          19970306; AU 2001-91395
                                                         20011116
     ICM A01N043-72; A01N043-80; C07D000-00; C07D261-04; C07D261-18;
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          C07D498-10
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          9831681 A UPAB: 20030630
     4-(3-Heterocyclylbenzoyl)-pyrazole derivatives (I) and their salts are
     new: R1, R2 = H; NO2; halo; etc.; R3 = H; halo; or 1-6C alkyl; R4, R5 = H;
     halo; CN; NO2; 1-4C alkyl optionally substituted by 1-4C alkoxy, di(1-4C
     alkoxy), etc.; or R4+R5 = 2-6C alkanediyl optionally mono- to
     tetrasubstituted by 1-4C alkyl and/or optionally interrupted by 0, NH or
     N(1-4C \text{ alkyl}); or CR4R5 forms C=0 or C=S; X=0; S; NR9; CO; or CR10R11; Y
     = 0; S; NR12; CO; or CR13R14; R9, R12 = H or 1-4C alkyl; R10, R11, R13,
     R14 = H; 1-4C alkyl; 1-4C haloalkyl; 1-4C alkoxycarbonyl; 1-4C
     haloalkoxycarbonyl; or CONR7R8; or R4 and R9 or R10 together or R5 and R12
     or R13 together form 2-6C alkanediyl optionally mono- to tetrasubstituted
     by 1-4C alkyl and/or optionally interrupted by O, NH or N(1-4C alkyl); R16
     = 1-6C alkyl; Z = H or SO2R17; R17 = e.g. 1-4C alkyl; compounds with X = Y
     = S are excluded together with e.g. 4-[2-chloro-3-(4,5-dihydroisoxazol-3-
     yl)-4-methylsulphonyl-benzoyl]-1-ethyl-5-hydroxy-1H-pyrazole.
          USE- (I) are herbicides. They are especially suitable for the
     selective pre- and post-emergence control of weeds and weed grasses, e.g.
     goosefoot, giant foxtail, white mustard and black nightshade in crops,
     e.g. wheat, rice, maize, soya and cotton. (I) are applied at a rate of
     0.001-3 kg/ha, preferably 0.01-1 kg/ha.
          ADVANTAGE - (I) are more active and tolerated better by cultivated
     plants than the pyrazol-4-ylbenzoyl derivatives known from WO 9626206.
     Dwg.0/0
FS
     CPI
     AB; GI; DCN
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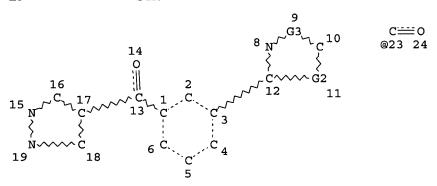
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GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE

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42 ANSWERS

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L11 ANSWER 1 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 474951-64-9 REGISTRY

Methanone, [3-(4,5-diphenyl-1H-imidazol-2-yl)-4,6-dihydroxy-2-CN methoxyphenyl](1-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

3D CONCORD FS

MF C32 H24 N4 O4

SR CA

CA, CAPLUS, TOXCENTER LC STN Files: DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

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1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:352951

L11 ANSWER 2 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

474951-62-7 REGISTRY RN

Methanone, [3-(4,5-diphenyl-1H-imidazol-2-yl)-4,6-dihydroxy-2-CN methoxyphenyl]-1H-pyrazol-4-yl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

C26 H20 N4 O4 MF

SR CA

STN Files: CA, CAPLUS, TOXCENTER LC

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:352951

L11 ANSWER 3 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN RN252190-66-2 REGISTRY

CN 1,3-Cyclohexanedione, 2-[2-chloro-4-(methylsulfonyl)benzoyl]-, mixt. with
 [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H pyrazol-4-yl)methanone (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)-, mixt. contg. (9CI)

MF C16 H14 Cl N3 O4 S2 . C14 H13 Cl O5 S

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)

CM 1

CRN 182060-80-6 CMF C16 H14 Cl N3 O4 S2

CM 2

CRN 99105-77-8 CMF C14 H13 Cl O5 S

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:20093

L11 ANSWER 4 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 252190-61-7 REGISTRY

CN 3-Pyridinecarboxamide, 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-, mixt. with [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)methanone (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-

hydroxy-1H-pyrazol-4-yl)-, mixt. contg. (9CI)

MF C16 H14 Cl N3 O4 S2 . C15 H18 N6 O6 S

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)

CM 1

CRN 182060-80-6

CMF C16 H14 Cl N3 O4 S2

CM 2

CRN 111991-09-4 CMF C15 H18 N6 O6 S

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:20093

L11 ANSWER 5 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 225648-54-4 REGISTRY

CN Methanone, (5-chloro-1-ethyl-1H-pyrazol-4-yl)[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H13 Cl2 N3 O3 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

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1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:5255

L11 ANSWER 6 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 225648-48-6 REGISTRY

CN Methanone, (5-chloro-1-methyl-1H-pyrazol-4-yl)[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H11 Cl2 N3 O3 S2

SR CF

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:5255

L11 ANSWER 7 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210631-71-3 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-2-thiazolyl)-4-(methylsulfonyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H16 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136165

L11 ANSWER 8 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210631-70-2 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-2-thiazolyl)-4-(methylthio)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H16 Cl N3 O2 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136165

L11 ANSWER 9 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210631-69-9 REGISTRY

CN Methanone, [2,4-dichloro-3-(4,5-dihydro-2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H13 Cl2 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136165

L11 ANSWER 10 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210631-60-0 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-4-(ethylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H20 Cl N3 O5 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136165

L11 ANSWER 11 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210631-41-7 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-2-oxazolyl)-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H14 Cl N3 O5 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136165

L11 ANSWER 12 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210577-14-3 REGISTRY

CN Methanone, [2,4-dichloro-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1Hpyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H11 Cl2 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

Searched by Noble Jarrell

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 13 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210577-13-2 REGISTRY

CN Methanone, [2-chloro-3-[4-(1,1-dimethylethyl)-2-thiazolyl]-4(methylsulfonyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA
INDEX NAME)

FS 3D CONCORD

MF C20 H22 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 14 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210577-10-9 REGISTRY

CN Methanone, (1-ethyl-5-hydroxy-1H-pyrazol-4-yl)[2-methyl-3-(4-methyl-2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H17 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAPILIS (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 15 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210577-09-6 REGISTRY

CN Methanone, (1-ethyl-5-hydroxy-1H-pyrazol-4-yl) [2-methyl-3-(4-phenyl-2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H19 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 16 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210577-04-1 REGISTRY

CN Methanone, [3-(4,5-dihydro-2-thiazolyl)-2-methylphenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H17 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

Searched by Noble Jarrell

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

REFERENCE 2: 129:136165

L11 ANSWER 17 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210576-91-3 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-4-(methylsulfonyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H20 Cl N3 O5 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

REFERENCE 2: 129:136165

L11 ANSWER 18 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210576-89-9 REGISTRY

CN Methanone, [2-chloro-3-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H18 Cl N3 O5 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

REFERENCE 2: 129:136165

L11 ANSWER 19 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-82-9 REGISTRY

CN Ethanone, 2-[[4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl]oxy]-1-phenyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H20 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 20 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-81-8 REGISTRY

CN Ethanone, 2-[[4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl]oxy]-1-(4-methylphenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C25 H22 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 21 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-80-7 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] [1-ethyl-5-(2-propynyloxy)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H16 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 22 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-79-4 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl][1-ethyl-5-(2-propenyloxy)-1H-pyrazol-4-yl]-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H18 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 23 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-78-3 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] [1-ethyl-5-[(4-methylphenyl)methoxy]-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H22 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 24 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-77-2 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] [1-ethyl-5-(1-phenylethoxy)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H22 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 25 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-60-3 REGISTRY

CN Methanone, [3-(4,5-dihydro-2-thiazolyl)-2-methylphenyl][1-ethyl-5-(phenylmethoxy)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H23 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 26 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-52-3 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](5-ethoxy-1-ethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H18 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 27 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-51-2 REGISTRY

CN Carbamic acid, methoxymethyl-, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H19 Cl N4 O6 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 28 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-50-1 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] [1-ethyl-5-(phenylmethoxy)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H20 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 29 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-49-8 REGISTRY

CN Benzoic acid, 4-chloro-, 4-[2-chloro-4-(methylsulfonyl)-3-(2-

thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H17 Cl2 N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 30 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-48-7 REGISTRY

CN Carbonic acid, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl methyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H16 Cl N3 O6 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 31 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-47-6 REGISTRY

CN Butanoic acid, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H20 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 32 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-46-5 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl][1-ethyl-5-(1-oxopropoxy)-1H-pyrazol-4-yl]-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H18 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 33 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-45-4 REGISTRY

CN Carbonic acid, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H18 Cl N3 O6 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 34 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-44-3 REGISTRY

CN 2-Butenoic acid, 3-methyl-, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H20 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 35 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-42-1 REGISTRY

CN Benzoic acid, 3-chloro-, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H17 Cl2 N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 36 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-40-9 REGISTRY

CN 2-Propenoic acid, 3-phenyl-, 4-[2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)benzoyl]-1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C25 H20 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 37 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-38-5 REGISTRY

CN Methanone, [5-(benzoyloxy)-1-ethyl-1H-pyrazol-4-yl][2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H18 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 38 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 210575-35-2 REGISTRY

CN Methanone, [5-(acetyloxy)-1-ethyl-1H-pyrazol-4-yl] [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H16 Cl N3 O5 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:136166

L11 ANSWER 39 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 198272-64-9 REGISTRY

CN Methanone, [2,4-dichloro-3-(1,3-dimethyl-1H-1,2,4-triazol-5-yl)phenyl] (5-hydroxy-1-methyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H13 Cl2 N5 O2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:346402

L11 ANSWER 40 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 182060-80-6 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H14 Cl N3 O4 S2

CI COM

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:247812

L11 ANSWER 41 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 182060-76-0 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-1-methyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H12 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:218862

REFERENCE 2: 125:247812

L11 ANSWER 42 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 182060-67-9 REGISTRY

CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-1,3-dimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

S 3D CONCORD

MF C16 H14 Cl N3 O4 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:218862

REFERENCE 2: 125:247812

=> d his

(FILE 'HOME' ENTERED AT 15:47:08 ON 22 JUL 2004)

FILE 'HCAPLUS' ENTERED AT 15:48:15 ON 22 JUL 2004 L1 3 US20020025910/PN

FILE 'REGISTRY' ENTERED AT 15:48:46 ON 22 JUL 2004

FILE 'HCAPLUS' ENTERED AT 15:48:51 ON 22 JUL 2004
L2 TRA L1 1- RN : 401 TERMS

FILE 'REGISTRY' ENTERED AT 15:48:52 ON 22 JUL 2004 L3 401 SEA L2

FILE 'WPIX' ENTERED AT 15:48:57 ON 22 JUL 2004 L4 1 US20020025910/PN

FILE 'REGISTRY' ENTERED AT 15:58:37 ON 22 JUL 2004

L5 STR L6 0 L5

L7 STR L5

L8 2 L7

L9 STR L7

L10 2 L9

L11 42 L9 FULL

SAVE TEMP L11 SHIAOOO6FUL/A

FILE 'HCAPLUS' ENTERED AT 16:11:57 ON 22 JUL 2004

L12 8 L11

L13 26786 BASF/CS, PA

L14 6 L12 AND L13

L15 2 L12 NOT L14

L16 1 L15 AND (PY<=1998 OR AY<=1998 OR PRY<=1998)

FILE 'USPATFULL, USPAT2' ENTERED AT 16:16:33 ON 22 JUL 2004 L17 6 L11

1 120 AM (110-1330 ON A10-1330 ON 1810-1330

FILE 'HCAOLD' ENTERED AT 16:19:01 ON 22 JUL 2004 L22 0 L11

=> b hcap

FILE 'HCAPLUS' ENTERED AT 16:32:01 ON 22 JUL 2004
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FILE COVERS 1907 - 22 Jul 2004 VOL 141 ISS 4 FILE LAST UPDATED: 21 Jul 2004 (20040721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d all fhitstr l12 tot

- L12 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2002:217200 HCAPLUS
- DN 137:352951
- ED Entered STN: 22 Mar 2002
- TI Synthesis and reactions of some new substituted 6-imidazolyl-4-oxo-4H-1-benzopyran-3- carboxaldehyde and use of DNA in evaluation of their biological activity
- AU Abdel-Rahman, A. H.; Khalil, A. M.; Keshk, E. M.
- CS Department of Chemistry, Faculty of Science, Mansoura University, Mansoura, Egypt
- SO Bollettino Chimico Farmaceutico (2001), 140(6), 387-396 CODEN: BCFAAI; ISSN: 0006-6648
- PB Societa Editoriale Farmaceutica
- DT Journal
- LA English
- CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1

GI

AΒ Vilsmeier-Haack reaction of imidazolyl acetophenone I gave 6-imidazolyl-4-oxo-4H-1- benzopyran-3-carboxaldehyde II. II was reacted with primary amines (1:1 molar ratio) to form the corresponding n-aryl (heteroaryl) imino derivs. Treatment of aldehyde II with excess amines (1:2 molar ratio) gave the corresponding 2-arylamino-3arylaminomethylenebenzopyran derivs. Selected n-aryl (heteroaryl) imino derivs. were reacted with thioglycollic acid to give benzopyranothiazepinone derivs. When II was treated with secondary amines, the corresponding trans-enaminoketones III were produced. III were reacted with hydrazines and/or hydroxylamine hydrochloride to give pyrazolyl and / or isoxazolyl benzene derivs., resp. The reaction of aldehyde II with hydrazines at reduced temps. gave the corresponding hydrazones. However, the reaction II with hydrazines on refluxing gave the corresponding pyrazole derivs. The structural formula of the new compds. were established by using different instrumental analyses. Some compds. in this study were biol. evaluated for their ability to bind to DNA.

ST benzopyran imidazolyl prepn antitumor agent; imidazole benzopyranyl prepn antitumor agent

IT Antitumor agents

Neoplasm

(preparation and antitumor activity of substituted imidazolyloxobenzopyran carboxaldehyde and derivs.)

IT 474950-98-6P 474951-00-3P 474951-02-5P 474951-04-7P 474951-07-0P 474951-09-2P 474951-11-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation and antitumor activity of substituted imidazolyloxobenzopyran carboxaldehyde and derivs.)

IT 474951-13-8P 474951-15-0P 474951-27-4P 474951-29-6P 474951-31-0P 474951-52-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antitumor activity of substituted imidazolyloxobenzopyran carboxaldehyde and derivs.)

IT 62-53-3, Aniline, reactions 68-11-1, reactions 95-54-5, o-Phenylenediamine, reactions 95-55-6, o-Aminophenol 100-63-0,

```
104-94-9, 4-Methoxyphenylamine
     Phenylhydrazine
                                                        106-40-1,
                          106-49-0, 4-Methylphenylamine, reactions
                                                                      109-89-7,
     4-Bromophenylamine
                               110-89-4, Piperidine, reactions
                                                                  110-91-8,
     Diethyl amine, reactions
     Morpholine, reactions 119-26-6, 2,4-Dinitrophenylhydrazine
                                                                     123-30-8,
                                               137-07-5, o-Aminothiophenol
     4-Hydroxyphenylamine
                            134-81-6, Benzil
     504-29-0, 2-Pyridinylamine
                                  212193-28-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation and antitumor activity of substituted imidazolyloxobenzopyran
        carboxaldehyde and derivs.)
TΤ
     474951-33-2P
                    474951-35-4P
                                   474951-37-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and antitumor activity of substituted imidazolyloxobenzopyran
        carboxaldehyde and derivs.)
IT
     474951-17-2P
                    474951-19-4P
                                   474951-21-8P
                                                  474951-23-0P
                                                                  474951-25-2P
                                                  474951-48-9P
                                                                  474951-50-3P
     474951-42-3P
                    474951-44-5P
                                   474951-46-7P
     474951-54-7P
                    474951-56-9P
                                   474951-58-1P
                                                  474951-60-5P
     474951-62-7P 474951-64-9P 474951-67-2P
                                                474951-69-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and antitumor activity of substituted imidazolyloxobenzopyran
        carboxaldehyde and derivs.)
RE.CNT
              THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
        22
RE
(1) Abdel-Rahman, A; Chem Papers 1999, V53, P323 HCAPLUS
(2) Atta, S; Arzneim-Forsch 1993, V43, P1354 HCAPLUS
(3) Burres, N; J Nat Prod 1992, V55, P1582 HCAPLUS
(4) Campbell, N; Chemistry of Carbon Compounds 1959, V4B, P809
(5) Elespuru, R; Cancer Res 1983, V43, P2819 HCAPLUS
(6) Ellis, G; Chromenes, Chromanones and Chromones 1977
(7) Evans, D; Eur J Med Chem 1996, V31, P635 HCAPLUS
(8) Fitton, A; J Chem Soc Perkin 1 1979, P1691 HCAPLUS
(9) Hishmat, O; Indian J Chem 1996, V35B, P30 HCAPLUS
(10) Matsukura, M; Chem Pharm Bull 1992, V40, P1823 HCAPLUS
(11) Nohara, A; J Med Chem 1985, V28, P559 HCAPLUS
(12) Qillardet, P; Proc Natl Acad Sci 1982, V79, P5971
(13) Ragab, F; Bull Fac Pharm 1992, V30, P215 HCAPLUS
(14) Schoenberg, A; J Am Chem Soc 1953, V75, P4992
(15) Sigg, I; Helv Chem Acta 1982, V65, P275 HCAPLUS
(16) Suffness, M; Methods Plant Biochem 1991, V6, P71 HCAPLUS
(17) Sugiyama, H; J Nat, Prod 1985, V48, P869 HCAPLUS
(18) Tajima, M; 1995 HCAPLUS
(19) Tajima, M; JP 07-118240 1995 HCAPLUS
(20) Varoli, L; Pharmazie 1997, V52, P578 HCAPLUS
(21) Wang, Y; J Org Chem 1997, V62, P7288 HCAPLUS
(22) Wawazonek, S; Heterocyclic Compounds 1951, V2, P229
IT
     474951-62-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and antitumor activity of substituted imidazolyloxobenzopyran
        carboxaldehyde and derivs.)
RN
     474951-62-7 HCAPLUS
     Methanone, [3-(4,5-diphenyl-1H-imidazol-2-yl)-4,6-dihydroxy-2-
CN
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methoxyphenyl]-1H-pyrazol-4-yl- (9CI) (CA INDEX NAME)

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Ph N OH OH NH
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ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
L12
     2000:645803 HCAPLUS
AN
DN
     133:218862
ED
     Entered STN: 15 Sep 2000
     Herbicidal mixture containing a 3-heterocyclyl-substituted benzoyl
TI
     derivative and an adjuvant
     Bratz, Matthias; Berghaus, Rainer; Otten, Martina; Sievernich, Bernd;
IN
     Kibler, Elmar; Vantieghem, Herve
PA
     Basf Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
IC
     ICM A01N043-80
     ICS A01N043-78
CC
     5-3 (Agrochemical Bioregulators)
FAN.CNT 1
                                           APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
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                                          WO 2000-EP1641 20000228
PΙ
     WO 2000053014
                     A1 20000914
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             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     EP 1158857
                      A1
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                            20020108
                                           BR 2000-8749
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     JP 2002538188
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                                                            20000228
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                       \mathbf{E}
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    NZ 514287
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                            20030725
                                          NZ 2000-514287
                                                            20000228
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                                           PT 2000-920450
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     ES 2198301
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                                          ES 2000-920450
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     AU 772265
                      В2
                            20040422
                                          AU 2000-41028
                                                            20000228
     BG 105874
                      Α
                            20020430
                                           BG 2001-105874
                                                            20010904
                                          US 2001-914873
     US 6514910
                      B1
                            20030204
                                                            20010905
     ZA 2001008150
                      Α
                            20021004
                                           ZA 2001-8150
                                                            20011004
PRAI DE 1999-19909833
                      Α
                            19990305
     WO 2000-EP1641
                      W
                            20000228
os
     MARPAT 133:218862
GΙ
```

$$R^4$$
-CO X R^2 R^2 R^3 I

The invention relates to a herbicidal mixture containing a 3-heterocyclyl-substituted benzoyl derivative I [R1, R2 = H, halo, C1-6 alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkyl halide, alkoxy or haloalkoxy; R3 = H, halo or C1-6 alkyl; X = (un)substituted isoxazolyl, 4,5-dihydroisoxazolyl or thiazolyl; R4 = (un)substituited pyrazoly]. The 2nd component of the mixture is an adjuvant, such as C1-5-alkyl C5-22 alkanoate, C10-20 carboxylic acid, partial phosphoric ester or partial sulfuric acid ester of a monohydroxy functional polyalkylether and optionally a alkyl polyoxyalkylene polyether. The adjuvants enhance the activity of I.

ST herbicide benzoyl deriv activity enhancing adjuvant

IT Fatty acids, biological studies

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(C10-20; activity-enhancing adjuvants for benzoyl derivative herbicide)

IT Alcohols, biological studies

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(C9-11, ethoxylated; activity-enhancing adjuvant for benzoyl derivative herbicide)

IT Carboxylic acids, biological studies

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(alkyl esters; activity-enhancing adjuvants for benzoyl derivative herbicide)

IT Herbicides

(compns. containing benzoyl derivative herbicides and activity-enhancing adjuvants)

IT Paraffin oils

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(emulsifier-containing, Atplus; activity-enhancing adjuvant for benzoyl derivative herbicide)

IT 112-39-0, Methyl palmitate 112-62-9, Methyl oleate 112-80-1, Oleic
 acid, biological studies 26183-52-8, Lutensol ON 110 80449-87-2,
 Klearfac AA 270 107119-88-0, Lutensit A-EP 128088-09-5, Plurafac LF
 700 201491-13-6, AG 6202

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(activity-enhancing adjuvant for benzoyl derivative herbicide)

IT **182060-67-9 182060-76-0** 210631-68-8

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (herbicidal composition containing activity-enhancing adjuvant and)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Basf Ag; WO 9626206 A 1996 HCAPLUS
- (2) Basf Corp; EP 0356812 A 1990 HCAPLUS
- (3) Hazen, J; US 4834908 A 1989 HCAPLUS
- IT 182060-67-9

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(herbicidal composition containing activity-enhancing adjuvant and)
RN 182060-67-9 HCAPLUS
CN Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydro

Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-1,3-dimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

PT 1087664

ES 2200527

US 6534444

BG 105144

NO 2000006315

NZ 508546

Т

Α

T3

Α

В1

Α

20031031

20031128

20040301

20001212

20030318

20011231

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ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
L12
AN
     1999:811030 HCAPLUS
DN
     132:20093
ED
     Entered STN: 24 Dec 1999
     Synergistic herbicidal mixtures.
ΤI
     Sievernich, Bernd; Landes, Max; Kibler, Elmar; Von Deyn, Wolfgang; Walter,
IN
     Helmut; Otten, Martina; Westphalen, Karl-Otto; Vantieghem, Herve
PA
     BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 98 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    German
IC
     ICM A01N043-80
     ICS A01N043-78; A01N043-80; A01N061-00; A01N043-78; A01N061-00
CC
     5-3 (Agrochemical Bioregulators)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                                          _____
PΙ
                           19991223
                                          WO 1999-EP4055 19990612
     WO 9965314
                     A1
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            KG, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ,
             TM, TR, UA, US, UZ, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
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    AU 9946089
                      A1
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                      B2
                            20030327
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                            20010313
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     EP 1087664
                      A1
                            20010404
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                            20030528
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                           TR 2000-20000375219990612
     TR 200003752
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PT 1999-929190

NZ 1999-508546

ES 1999-929190

US 2000-719429

BG 2001-105144

NO 2000-6315

19990612

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20001212

20001212

20010111

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20020115
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                        Α
                                              ZA 2001-395
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     US 2003203819
                              19980616
PRAI DE 1998-19826431
                        Α
                              19990612
     WO 1999-EP4055
                        W
                        Α3
                              20001212
     US 2000-719429
os
     MARPAT 132:20093
GΙ
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$$R^{6}$$
 O R^{1} R^{2} R^{3} R^{4}

The invention relates to synergistic herbicidal mixts. containing at least one AΒ benzoylpyrazole derivative I [R1, R3 = H, halo, alkyl, alkyl halide, alkoxy, alkoxy halide, alkylthio, alkyl sulfinyl, or alkyl sulfonyl; R2= (un) substituted thiazole-2-yl, thiazole-4-yl, thiazole-5-yl, isoxazol-3-yl, isoxazol-4-yl, isoxazol-5-yl, 4,5-dihydroisoxazol-3-yl, 4,5-dihydroisoxazol-4-yl or 4,5-dihydroisoxazol-5-yl; R4 = H, halo or alkyl; R5 = alkyl; R6 = H or alkyl] or I salts and at least one herbicide from the group of acetyl CoA carboxylase inhibitors (ACC), acetolactate synthase inhibitors (ALS), amides, auxin herbicides, auxin transport inhibitors, carotenoid biosynthesis inhibitors, enolpyruvyl-shikimate-3phosphate synthase inhibitors (ESPS), glutamine synthetase inhibitors, lipid biosynthesis inhibitors, mitosis inhibitors, protoporphyrinogen-IXoxidase inhibitors, photosynthesis inhibitors, synergistic agents, growth substances, cell wall biosynthesis inhibitors and various other herbicides.

synergism herbicide benzoylpyrazole derivs mixt

Ι

IT

```
ST
     Herbicides
        (synergistic; compns. containing benzoylpyrazole derivs.)
                                                252190-52-6
                                                              252190-53-7
IT
     252190-49-1
                   252190-50-4
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     252191-02-9
                   252191-03-0
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic herbicide)
     61-82-5D, 1H-1,2,4-Triazol-3-amine, mixts. with benzoylpyrazole derivs.
ΙT
     75-99-0D, mixts. with benzoylpyrazole derivs.
                                                      85-00-7D, mixts. with
                               88-85-7D, mixts. with benzoylpyrazole derivs.
     benzoylpyrazole derivs.
                                                      93-71-0D, mixts. with
     93-65-2D, mixts. with benzoylpyrazole derivs.
                               94-74-6D, mixts. with benzoylpyrazole derivs.
     benzoylpyrazole derivs.
     94-75-7D, mixts. with benzoylpyrazole derivs.
                                                      94-81-5D, mixts. with
                               94-82-6D, mixts. with benzoylpyrazole derivs.
     benzoylpyrazole derivs.
                                                      101-21-3D, mixts. with
     95-06-7D, mixts. with benzoylpyrazole derivs.
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RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic herbicides)

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     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic herbicides)
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
(1) Basf AG; WO 9626206 A 1996 HCAPLUS
(2) Deyn Wolfgang Von; WO 9831681 A 1998 HCAPLUS
(3) Idemitsu Kosan Co; WO 9723135 A 1997 HCAPLUS
(4) Nippon Soda Co; EP 0900795 A 1999 HCAPLUS
(5) Nissan Chem Ind Ltd; JP 06-211610 A 1994
(6) Takahashi Akihiro; WO 9828981 A 1998 HCAPLUS
     252190-61-7
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
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     252190-61-7 HCAPLUS
     3-Pyridinecarboxamide, 2-[[[(4,6-dimethoxy-2-
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CRN 182060-80-6

CMF C16 H14 Cl N3 O4 S2

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Searched by Noble Jarrell
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     Preparation of benzylidenepyrazolones as herbicides.
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PΑ
     BASF Aktiengesellschaft, Germany
SO
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 R^{3}
 R^{3}

Title compds. [I; R1, R6 = (substituted) alkyl; R2 = (substituted) alkyl, AB alkoxy, halo, nitro, cyano; R3 = H, halo, nitro, cyano, NR5R6, OCOR5, NR5COR6, CO2R5, COSR5, CONR5R6, alkoxyiminoalkyl, alkoxycarbonyl, (substituted) alkyl, alkoxy, alkylthio, alkenyl, Ph, PhO, 5-6 membered (unsatd.) heterocyclyl; R4 = alkyl, haloalkyl; R3R4 = (substituted) (unsatd.) 2-3 membered bridge which can contain 1 S, SO, or SO2; R5 = H, (substituted) alkyl; R7 = H, alkyl, haloalkyl; n = 0, 1, 2; X = H, Cl, Br], were prepared Thus, [2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4methylsulfonylphenyl] (5-hydroxy-1-methyl-1H-pyrazol-4-yl) ketone was refluxed 7 h with POCl3 and cat. DMF to give cis-4-[chloro[2-chloro-3-(4,5dihydroisoxazol-3-yl)-4-methylsulfonylphenyl]methylene]-2-methyl-2,4dihydropyrazol-3-one. The 2-Et derivative of the above compound postemergent gave >98% control of a variety of weeds while leaving corn unaffected. benzylidenepyrazolone prepn herbicide; pyrazolone benzylidene prepn ST herbicide; chlorodihydroisoxazolylmethylsulfonylphenylmethylenemethyldihyd ropyrazolone prepn herbicide ΙT Herbicides

(preparation of benzylidenepyrazolones as herbicides)

IT 225648-12-4P 225648-23-7P 225648-30-6P 225648-36-2P 225648-42-0P

225648-48-6P 225648-54-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzylidenepyrazolones as herbicides)

IT 210576-74-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of benzylidenepyrazolones as herbicides)

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IT 225648-48-6P
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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzylidenepyrazolones as herbicides)

RN 225648-48-6 HCAPLUS

CN Methanone, (5-chloro-1-methyl-1H-pyrazol-4-yl) [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

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ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
L12
     1998:509195 HCAPLUS
AN
DN
     129:136166
     Entered STN: 17 Aug 1998
ED
     Preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides.
TΤ
     Von Deyn, Wolfgang; Hill, Regina Luise; Baumann, Ernst; Engel, Stefan;
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     Mayer, Guido; Rheinheimer, Joachim; Witschel, Matthias; Misslitz, Ulf;
     Wagner, Oliver; Otten, Martina; Walter, Helmut; Westphalen, Karl-Otto
PA
     BASF A.-G., Germany
     PCT Int. Appl., 393 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     German
IC
     ICM C07D413-10
         A01N043-72; A01N043-48; C07D417-10; C07D409-10; C07D405-10;
          C07D401-10; C07D403-10; C07D411-10; C07D231-20; C07D231-24
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
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             UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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GI
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$$R^{5}$$
 R^{2}
 R^{3}
 R^{4}
 R^{3}

ABTitle compds. [I; R1, R3 = H, NO2, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, aminosulfonyl, N-alkylaminosulfonyl, N, N-dialkylaminosulfonyl, N-alkylsulfonylamino, N-haloalkylsulfonylamino, N-alkyl-N-alkylsulfonylamino or N-alkyl-N-haloalkylsulfonylamino; R2 = (substituted) 5-6 membered heterocyclyl containing 1-4 heteroatoms selected from O, S, N; R4 = H, halo, alkyl; R5 = substituted pyrazol-4-yl], were prepared as herbicides (no data). Thus, Me 2-chloro-3-hydroxyiminomethyl-4methylsulfonylbenzoate (preparation given) in CH2Cl2 was treated with ethylene, NaOAc, and aqueous NaOCl to give 90% Me 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoate. This was converted to the acid chloride, which was coupled with 5-hydroxy-1-methylpyrazole in dioxane/Et3N to give 92% 4-[2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl]-5hydroxy-1-methyl-1H-pyrazole.

ST heterocyclylbenzoylpyrazole prepn herbicide; pyrazole heterocyclylbenzoyl prepn herbicide

TT Herbicides

IT

(preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)

210577-17-6P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides) ΙT 210575-05-6P 181997-71-7P 198272-51-4P 198272-54-7P 198272-55-8P 210575-07-8P 210575-09-0P 210575-11-4P 210575-13-6P 210575-14-7P 210575-15-8P 210575-16-9P 210575-17-0P 210575-18-1P 210575-19-2P 210575-20-5P 210575-24-9P 210575-21-6P 210575-22-7P 210575-23-8P 210575-25-0P 210575-29-4P 210575-26-1P 210575-27-2P 210575-28-3P 210575-30-7P 210575-31-8P 210575-32-9P 210575-33-0P 210575-34-1P 210575-35-2P 210575-38-5P 210575-40-9P 210575-42-1P 210575-44-3P 210575-45-4P 210575-46-5P 210575-47-6P 210575-48-7P 210575-49-8P 210575-50-1P 210575-51-2P 210575-55-6P 210575-52-3P 210575-54-5P 210575-53-4P 210575-56-7P 210575-58-9P 210575-59-0P 210575-57-8P 210575-63-6P 210575-60-3P 210575-61-4P 210575-62-5P 210575-64-7P 210575-66-9P 210575-67-0P 210575-65-8P 210575-68-1P

210575-72-7P

210575-70-5P

IT

IT

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except
adverse); BSU (Biological study, unclassified); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)
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Chlorocarbonylsulfenyl chloride
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)

- RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE
- (1) Basf Aktiengesellschaft; WO 9626206 A 1996 HCAPLUS
- (2) Nissan Chemical Industries Ltd; GB 2122188 A 1984 HCAPLUS
- (3) Nissan Chemical Industries Ltd; EP 0203428 A 1986 HCAPLUS
- (4) Toshiaki, Y; US 4460597 A 1984 HCAPLUS
- IT 210575-35-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 4-(3-heterocyclylbenzoyl)pyrazoles as herbicides)

RN 210575-35-2 HCAPLUS

CN Methanone, [5-(acetyloxy)-1-ethyl-1H-pyrazol-4-yl] [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)

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L12 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
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- AN 1998:509194 HCAPLUS
- DN 129:136165
- ED Entered STN: 17 Aug 1998
- TI Preparation of heterocyclylbenzoylpyrazoles and related compounds as herbicides.
- IN Von Deyn, Wolfgang; Hill, Regina Luise; Kardorff, Uwe; Baumann, Ernst; Engel, Stefan; Mayer, Guido; Witschel, Matthias; Rack, Michael; Gotz, Norbert; Gebhardt, Joachim; Misslitz, Ulf; Walter, Helmut; Westphalen, Karl-Otto; Otten, Martina; Rheinheimer, Joachim; et al.
- PA BASF A.-G., Germany
- SO PCT Int. Appl., 173 pp.

CODEN: PIXXD2

- DT Patent
- LA German
- IC ICM C07D413-10

ICS A01N043-72; C07D498-10; C07D417-10; C07D261-04; C07D291-04; C07D273-00; C07D263-10; C07D261-20; C07D277-10; C07D277-34;

C07D403-10; C07D419-10; C07D498-10; C07D311-00; C07D261-00

28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 5

FAN.CNT 3

CC

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APPLICATION NO. DATE
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                     KIND DATE
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R^{15} & & & & \\
R^{2} & & & & \\
R^{3} & & & & \\
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Title compds. [I; R1, R2 = H, NO2, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl; R3 = H, halo, alkyl; R4, R5 = H, halo, cyano, NO2, alkyl, alkoxyalkyl, dialkoxyalkyl, dialkylaminoalkyl, (substituted), Ph, PhCH2, etc.; R4R5 = O, S; X = O, S, NR9, CO, CR10R11; R4R9 or R4R10 or R5R12 or R5R13 = (substituted) (interrupted) alkylene; Y = O, S, NR12, CO, CR13R14; R9, R12 = H, alkyl; R10-R14 = H, alkyl, haloalkyl, alkoxycarbonyl, haloalkoxycarbonyl, CONR7R8; R15 = substituted 4-pyrazolyl], were prepared as herbicides and plant growth regulators (no data). Thus, 5-hydroxy-1-methylpyrazole in dioxane was treated with 2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl chloride (preparation given) in dioxane and with Et3N in dioxane followed by 2 h stirring to give 92% 4-[2-chloro-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonylbenzoyl]-5-hydroxy-1-methyl-1H-pyrazole.

ST heterocyclylbenzoylpyrazozle prepn herbicide; pyrazole heterocyclylbenzoyl prepn herbicide

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(1) Basf Aq; WO 9626206 A 1996 HCAPLUS
(2) Nissan Chemical Ind Ltd; EP 0203428 A 1986 HCAPLUS
(3) Sankyo Co; DE 2513750 A 1975 HCAPLUS
(4) Sankyo Co; FR 2316235 A 1977 HCAPLUS
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ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
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     Preparation of novel heterocycle-substituted benzene derivatives and
TI
     herbicides
     Adachi, Hiroyuki; Yamaguchi, Masao; Miyahara, Osamu; Tanaka, Katsunori;
IN
     Kawana, Takashi; Takahashi, Akihiro; Koguchi, Masami; Yamagishi, Hideki
PΑ
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SO
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$$R^{6}XO$$
 R^{1}
 R^{2}
 R^{2}
 R^{2}
 R^{4}
 R^{2}
 R^{3}
 R^{2}

$$Q = \frac{Me}{Q - N}$$

Benzoylpyrazole derivs. represented by general formula [I; R1, R2, R3 = AΒ halo, C1-6 alkyl, C1-6 alkoxy, NO2, cyano, C1-6 haloalkyl, haloalkoxy, or alkylthio, alkylsulfinyl, or alkylsulfonyl; n = 0, 1, 2; Het = an optionally substituted saturated or unsatd. 5-membered heterocyclic group which is bonded to the benzene ring at a carbon atom and which contains one to four hetero-atoms selected from among N, O and S and is substituted with R7 and R8; R4 = hydrogen, C1-6 alkyl, haloalkyl, or hydroxyalkyl, C1-6 alkoxy-C1-6 alkyl; R5 = C1-6 alkyl, C3-8 cycloalkyl, (un)substituted Ph; X = SO2, (CH2)mCO, optionally alkyl-substituted C1-6 alkylene, a single bond; wherein m = 0, 1-3; R6 = optionally substituted phenyl] are prepared The above compds. exhibit an excellent herbicidal activity with good selectivity for weeds at a low dosage. Thus, 4-[2,4-dichloro-3-(3methyl-1,2-isoxazol-5-yl)benzoyl]-1,3-dimethyl-5-hydroxypyrazole was dissolved in CH2Cl2, followed by adding an aqueous K2CO3, p-toluenesulfonyl chloride, and benzyltrimethylammonium chloride in this order, and the resulting mixture was stirred at room temperature overnight to give I (R1 = R2

Cl, R3 = H, R4 = R5 = Me, R6X = p-toluenesulfonyl, Het = Q). I (R1 = F, R2 = S02Me, R3 = R4 = H, R5 = Me, R6X = p-toluenesulfonyl, Het = Q) at 250 g/ha postemergence controlled 100% Abutilon theophrasti, Echinochloa crus-galli, Xanthium pensylvanicum, and Setaria faberii and gave no damage to corn seedlings.

ST isoxazolylbenzoylpyrazole prepn herbicide; benzoylpyrazole isoxazolyl prepn herbicide

IT Herbicides

IT

(preparation of novel heterocycle-substituted benzene derivs. as herbicides) 198271-93-1P 198271-94-2P 198271-95-3P 198271-96-4P 198271-92-0P 198271-98-6P 198271-99-7P 198272-00-3P 198272-01-4P 198271-97-5P 198272-03-6P 198272-04-7P 198272-05-8P 198272-06-9P 198272-02-5P 198272-08-1P 198272-09-2P 198272-10-5P 198272-11-6P 198272-07-0P 198272-12-7P 198272-13-8P 198272-14-9P 198272-15-0P 198272-16-1P 198272-18-3P 198272-19-4P 198272-20-7P 198272-21-8P 198272-17-2P 198272-23-0P 198272-24-1P 198272-25-2P 198272-26-3P 198272-27-4P 198272-28-5P 198272-29-6P 198272-30-9P 198272-31-0P 198272-32-1P 198272-33-2P 198272-34-3P 198272-35-4P 198272-36-5P 198272-37-6P 198272-38-7P 198272-39-8P 198272-40-1P 198272-41-2P 198272-42-3P 198272-46-7P 198272-47-8P 198272-43-4P 198272-44-5P 198272-45-6P 198273-15-3P 198273-16-4P 198273-92-6P RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic

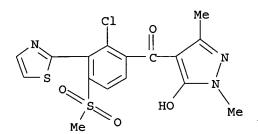
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(preparation of novel heterocycle-substituted benzene derivs. as herbicides)
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     methylmercaptide
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     Otten, Martina; Vossen, Marcus; Plath, Peter; Rang, Harald; Harreus,
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     BASF A.-G., Germany
PA
     PCT Int. Appl., 50 pp.
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$$\mathbb{R}^2$$
 \mathbb{R} \mathbb{N} \mathbb{N}

Title compds. [I; R = COZR4; R1 = alkyl; R2 = H, (halo)alkyl; R3 = H, AΒ alkyl- or -(alkyl)phenylsulfonyl; R4 = heterocyclyl; Z = (un)substituted 1,3-phenylene] were prepared Thus, 1,3-dimethyl-5-hydroxypyrazole was acylated by 2-chloro-4-methylsulfonyl-3-(5-oxazolyl)benzoyl chloride to qive title compound II. Data for herbicidal activity of 2 I were given. ST benzoylpyrazole prepn herbicide IT Herbicides (4-benzoylpyrazoles) 182060-59-9P IT 182060-43-1P 182060-47-5P 182060-50-0P 182060-55-5P 182060-63-5P **182060-67-9P** 182060-71-5P 182060-76-0P 182060-80-6P RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 4-benzoylpyrazoles as herbicides) IT 151-00-8, Isobutyraldehyde oxime 5203-77-0, 1,3-Dimethyl-5hydroxypyrazole 82961-52-2 105917-80-4 121359-48-6, 2-(Tributylstannyl)thiazole 182003-84-5 182061-44-5 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 4-benzoylpyrazoles as herbicides) 120100-04-1P 120100-44-9P 181997-71-7P 181997-72-8P IT 106904-09-0P 181997-73-9P 181997-74-0P 181997-75-1P 181997-76-2P 181997-77-3P 181997-79-5P 181997-81-9P 181997-82-0P 181997-78-4P 181997-80-8P 181997-85-3P 181997-86-4P 181997-87-5P 181997-83-1P 181997-84-2P 181997-89-7P 181997-90-0P 181997-91-1P 181997-92-2P 181997-88-6P 181997-95-5P 181997-96-6P 181997-97-7P 181997-93-3P 181997-94-4P 181997-98-8P 181997-99-9P 181998-00-5P 181998-01-6P 181998-02-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 4-benzoylpyrazoles as herbicides) IT 182060-67-9P RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 4-benzoylpyrazoles as herbicides) RN 182060-67-9 HCAPLUS Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-CN



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FILE 'USPATFULL' ENTERED AT 16:32:42 ON 22 JUL 2004
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FILE 'USPAT2' ENTERED AT 16:32:42 ON 22 JUL 2004

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1,3-dimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

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L17 ANSWER 1 OF 6 USPATFULL on STN
       2003:289060 USPATFULL
AΝ
TI
       Synergistically acting herbicidal mixtures
       Sievernich, Bernd, Iggelheim, GERMANY, FEDERAL REPUBLIC OF
TN
       Landes, Max, Gonnheim, GERMANY, FEDERAL REPUBLIC OF
       Kibler, Elmar, Hassloch, GERMANY, FEDERAL REPUBLIC OF
       Deyn, Wolfgang Von, Neustadt, GERMANY, FEDERAL REPUBLIC OF
       Walter, Helmut, Obrigheim, GERMANY, FEDERAL REPUBLIC OF
       Otten, Martina, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF
       Westphalen, Karl-Otto, Speyer, GERMANY, FEDERAL REPUBLIC OF
       Vantieghem, Herve, Stutensee, GERMANY, FEDERAL REPUBLIC OF
       US 2003203819
                          A1
                               20031030
PΙ
                          A1
                               20030123 (10)
ΑI
       US 2003-349094
      Division of Ser. No. US 2000-719429, filed on 12 Dec 2000, GRANTED, Pat.
RLI
       No. US 6534444 A 371 of International Ser. No. WO 1999-EP4055, filed on
       12 Jun 1999, UNKNOWN
      DE 1998-19826431
                           19980616
PRAI
DT
       Utility
FS
       APPLICATION
       KEIL & WEINKAUF, 1350 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036
LREP
       Number of Claims: 31
CLMN
       Exemplary Claim: 1
ECL
       No Drawings
DRWN
LN.CNT 2848
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A synergistic herbicidal mixture comprising
AB
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A) at least one 3-heterocyclyl-substituted benzoyl derivative of the formula I ##STR1##

in which the variables have the following meanings:

R.sup.1, R.sup.3 are hydrogen, halogen, alkyl, halogenalkyl, alkoxy, halogenalkoxy, alkylthio, alkylsulfinyl or alkylsulfonyl;

R.sup.2 is a heterocyclic radical selected from the group: thiazol-2-yl, thiazol-4-yl, thiazol-5-yl, isoxazol-3-yl, isoxazol-4-yl, isoxazol-5-yl, 4,5-dihydroisoxazol-3-yl, 4,5-dihydroisoxazol-4-yl and 4,5-dihydroisoxazol-5-yl, it being possible for these to be unsubstituted or mono- or polysubstituted by halogen, alkyl, alkoxy, haloalkyl, haloalkoxy or alkylthio;

R.sup.4 is hydrogen, halogen or alkyl;

R.sup.5 is alkyl;

R.sup.6 is hydrogen or alkyl;

or one of its environmentally compatible salts; and

B) a synergistically effective amount of at least one herbicidal compound from the group of the acetyl-CoA carboxylase inhibitors (ACC), acetolactate synthase inhibitors (ALS), amides, auxin herbicides, auxin transport inhibitors, carotenoid biosynthesis inhibitors, enolpyruvylshikimate-3-phosphate synthase inhibitors (ESPS), glutamine synthetase inhibitors, lipid biosynthesis inhibitors, mitosis inhibitors, protophorphyrinogen [sic] IX oxidase inhibitors,

photosynthesis inhibitors, synergists, growth substances, cell wall biosynthesis inhibitors and a variety of other herbicides.

Compositions comprising these mixtures, processes for the preparation of these compositions, and their use for controlling undesired plants.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      INCLM: 504/138.000
INCL
      INCLS: 504/144.000; 504/148.000; 504/134.000; 504/136.000
NCL
      NCLM: 504/138.000
      NCLS: 504/144.000; 504/148.000; 504/134.000; 504/136.000
IC
      [7]
      ICM: A01N043-64
      ICS: A01N043-60; A01N043-36; A01N037-10; A01N047-28
                             COPYRIGHT 2004 ACS on STN
CHEMICAL ABSTRACTS INDEXING
                        PATENT
                                    KIND DATE
                   ------
     CA 132:20093 * WO 9965314 A1 19991223
os
* CA Indexing for this record included
     5-3 (Agrochemical Bioregulators)
     synergism herbicide benzoylpyrazole derivs mixt
ST
IT
     Herbicides
       (synergistic; compns. containing benzoylpyrazole derivs.)
IT
     252190-49-1 252190-50-4 252190-51-5 252190-52-6
                                                           252190-53-7
                                                           252190-58-2
     252190-54-8
                   252190-55-9
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                                              252190-57-1
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     252190-59-3
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     252190-63-9
                  252190-68-4 252190-69-5 252190-70-8
                                                           252190-71-9
     252190-67-3
                                             252190-75-3
                                                           252190-76-4
     252190-72-0
                  252190-73-1 252190-74-2
     252190-77-5 252190-78-6 252190-79-7 252190-80-0
                                                           252190-81-1
                  252190-83-3 252190-84-4 252190-85-5
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     252190-82-2
                  252190-88-8 252190-89-9 252190-90-2
                                                           252190-91-3
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     252190-92-4
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                                                           252190-96-8
     252190-97-9
                   252190-98-0 252190-99-1 252191-00-7
                                                           252191-01-8
     252191-02-9
                   252191-03-0
       (synergistic herbicide)
     61-82-5D, 1H-1,2,4-Triazol-3-amine, mixts. with benzoylpyrazole derivs.
TT
     75-99-0D, mixts. with benzoylpyrazole derivs. 85-00-7D, mixts. with
                              88-85-7D, mixts. with benzoylpyrazole derivs.
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     93-65-2D, mixts. with benzoylpyrazole derivs. 93-71-0D, mixts. with
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     benzoylpyrazole derivs. 145-73-3D, mixts. with benzoylpyrazole derivs.
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     benzoylpyrazole derivs. 330-54-1D, mixts. with benzoylpyrazole derivs.
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957-51-7D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1014-69-3D, mixts. with benzoylpyrazole derivs. 1014-70-6D, mixts. with benzoylpyrazole derivs. 1071-83-6D, mixts. with benzoylpyrazole derivs. 1114-71-2D, mixts. with benzoylpyrazole derivs. 1134-23-2D, mixts. with benzoylpyrazole derivs. 1194-65-6D, mixts. with benzoylpyrazole derivs. 1420-07-1D, mixts. with benzoylpyrazole derivs. 1582-09-8D, mixts. with 1610-18-0D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1689-83-4D, mixts. with benzoylpyrazole derivs. 1689-84-5D, mixts. with benzoylpyrazole derivs. 1698-60-8 1698-60-8D, mixts. with 1702-17-6D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1836-75-5D, mixts. with 1746-81-2D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1836-77-7D, mixts. with benzoylpyrazole derivs. 1861-32-1D, mixts. with benzoylpyrazole derivs. 1861-40-1D, mixts. with 1910-42-5D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1912-24-9D, mixts. with benzoylpyrazole derivs. 1912-26-1D, mixts. with 1918-00-9D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1918-02-1D, mixts. with benzoylpyrazole derivs. 1918-11-2D, mixts. with benzoylpyrazole derivs. 1918-13-4D, mixts. with benzoylpyrazole derivs. 1918-16-7D, mixts. with benzoylpyrazole derivs. 1929-77-7D, mixts. with 1929-88-0D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 1967-16-4D, mixts. with benzoylpyrazole derivs. 1982-47-4D, mixts. with 1982-49-6D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 2008-41-5D, mixts. with benzoylpyrazole derivs. 2163-69-1D, mixts. with 2164-08-1D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 2164-17-2D, mixts. with benzoylpyrazole derivs. 2212-67-1D, mixts. with benzoylpyrazole derivs. 2303-16-4D, mixts. with benzoylpyrazole derivs. 2303-17-5D, mixts. with benzoylpyrazole derivs. 2813-95-8D, mixts. with 3050-27-9D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 3337-71-1D, mixts. with benzoylpyrazole derivs. 3766-60-7D, mixts. with 3813-05-6D, mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 4147-51-7D, mixts. with benzoylpyrazole derivs. 4212-93-5D, mixts. with benzoylpyrazole derivs. 4658-28-0D, mixts. with benzoylpyrazole derivs. 4726-14-1D, mixts. with benzoylpyrazole derivs. 4849-32-5D, mixts. with benzoylpyrazole derivs. 5902-51-2D, mixts. with benzoylpyrazole derivs. 5915-41-3D, mixts. with benzoylpyrazole derivs. 6616-80-4D, mixts. with benzoylpyrazole derivs. 7287-19-6D, mixts. with benzoylpyrazole derivs. 7287-36-7D, mixts. with benzoylpyrazole derivs. 13181-17-4D, mixts. with benzoylpyrazole derivs. 13360-45-7D, mixts. with benzoylpyrazole 13684-56-5D, mixts. with benzoylpyrazole derivs. 13684-63-4D, mixts. with benzoylpyrazole derivs. 14214-32-5D, mixts. with benzoylpyrazole derivs. 14437-17-3D, mixts. with benzoylpyrazole 15299-99-7D, 15165-67-0D, mixts. with benzoylpyrazole derivs. derivs. mixts. with benzoylpyrazole derivs. 15457-05-3D, mixts. with benzoylpyrazole derivs. 15545-48-9D, mixts. with benzoylpyrazole 16118-49-3D, 15972-60-8D, mixts. with benzoylpyrazole derivs. derivs. mixts. with benzoylpyrazole derivs. 16484-77-8D, mixts. with benzoylpyrazole derivs. 18691-97-9D, mixts. with benzoylpyrazole derivs. 19044-88-3D, mixts. with benzoylpyrazole derivs. 19666-30-9D, mixts. with benzoylpyrazole derivs. 19937-59-8D, mixts. with benzoylpyrazole derivs. 20354-26-1D, mixts. with benzoylpyrazole 21087-64-9D, mixts. with benzoylpyrazole derivs. 21267-72-1D, derivs. 21725-46-2D, mixts. with mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 22212-55-1D, mixts. with benzoylpyrazole derivs. 22936-75-0D, mixts. with benzoylpyrazole derivs. 22936-86-3D, mixts. with benzoylpyrazole derivs. 23184-66-9D, mixts. with benzoylpyrazole derivs. 23950-58-5D, mixts. with benzoylpyrazole 24151-93-7D, mixts. with benzoylpyrazole derivs. derivs. 25057-89-0D, mixts. with benzoylpyrazole derivs. 26225-79-6D, mixts. with benzoylpyrazole derivs. 26259-45-0D, mixts. with benzoylpyrazole derivs. 26399-36-0D, mixts. with benzoylpyrazole derivs. 27314-13-2D,

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mixts. with benzoylpyrazole derivs. 77501-63-4D, mixts. with benzoylpyrazole derivs. 77501-90-7D, mixts. with benzoylpyrazole derivs. 79241-46-6D, mixts. with benzoylpyrazole derivs. 79277-27-3D, mixts. with benzoylpyrazole derivs. 79540-50-4D, mixts. with 80020-41-3D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 81334-34-1D, mixts. with benzoylpyrazole derivs. 81335-37-7D, derivs. mixts. with benzoylpyrazole derivs. 81335-77-5D, mixts. with benzoylpyrazole derivs. 81405-85-8D, mixts. with benzoylpyrazole 81591-81-3D, mixts. with benzoylpyrazole derivs. 81777-89-1D, derivs. mixts. with benzoylpyrazole derivs. 82097-50-5D, mixts. with 82558-50-7D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 82692-44-2D, mixts. with benzoylpyrazole derivs. 83055-99-6D, derivs. 83164-33-4D, mixts. with mixts. with benzoylpyrazole derivs. benzoylpyrazole derivs. 84087-01-4D, mixts. with benzoylpyrazole 84478-52-4D, mixts. with benzoylpyrazole derivs. 84496-56-0D, derivs. mixts. with benzoylpyrazole derivs. 85785-20-2D, mixts. with 85830-77-9D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 86209-51-0D, mixts. with benzoylpyrazole derivs. 87237-48-7D, derivs. mixts. with benzoylpyrazole derivs. 87310-56-3D, mixts. with benzoylpyrazole derivs. 87392-12-9D, mixts. with benzoylpyrazole 87674-68-8D, 87546-18-7D, mixts. with benzoylpyrazole derivs. derivs. mixts. with benzoylpyrazole derivs. 87757-18-4D, mixts. with 87818-31-3D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 87820-88-0D, mixts. with benzoylpyrazole derivs. 88678-67-5D, derivs. mixts. with benzoylpyrazole derivs. 90717-03-6D, mixts. with benzoylpyrazole derivs. 90982-32-4D, mixts. with benzoylpyrazole derivs. 93697-74-6D, mixts. with benzoylpyrazole derivs. 94051-08-8D, mixts. with benzoylpyrazole derivs. 94125-34-5D, mixts. with benzoylpyrazole derivs.

(synergistic herbicides)

IT

94593-91-6D, mixts. with benzoylpyrazole derivs. with benzoylpyrazole derivs. 96491-05-3D, mixts. with benzoylpyrazole 96525-23-4D, mixts. with benzoylpyrazole derivs. mixts. with benzoylpyrazole derivs. 97886-45-8D, mixts. with 98967-40-9D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 99105-77-8D, mixts. with benzoylpyrazole derivs. 99129-21-2D, derivs. mixts. with benzoylpyrazole derivs. 99485-76-4D, mixts. with benzoylpyrazole derivs. 99662-11-0D, mixts. with benzoylpyrazole 100784-20-1D, mixts. with benzoylpyrazole derivs. 101200-48-0D, mixts. with benzoylpyrazole derivs. with benzoylpyrazole derivs. 103361-09-7D, mixts. with benzoylpyrazole 104040-78-0D, mixts. with benzoylpyrazole derivs. 104098-48-8D, mixts. with benzoylpyrazole derivs. with benzoylpyrazole derivs. 109293-97-2D, mixts. with benzoylpyrazole derivs. 111479-05-1D, mixts. with benzoylpyrazole derivs. 111578-32-6D, mixts. with benzoylpyrazole derivs. 111991-09-4D, mixts. with benzoylpyrazole 114311-32-9D, mixts. with benzoylpyrazole derivs. 117337-19-6D, mixts. with benzoylpyrazole derivs. 117718-60-2D, mixts. with benzoylpyrazole derivs. 119738-06-6D, mixts. with benzoylpyrazole derivs. 120162-55-2D, mixts. with benzoylpyrazole derivs. 120890-70-2D, mixts. with benzoylpyrazole derivs. 122008-85-9D, mixts. with benzoylpyrazole derivs. 122548-33-8D, mixts. with benzoylpyrazole derivs. 122836-35-5D, mixts. with benzoylpyrazole derivs. 122931-48-0D, mixts. with benzoylpyrazole 123249-43-4D, mixts. with benzoylpyrazole derivs. 123342-93-8D, mixts. with benzoylpyrazole derivs. with benzoylpyrazole derivs. 125306-83-4D, mixts. with benzoylpyrazole 125401-92-5D, mixts. with benzoylpyrazole derivs. derivs.

95480-33-4D, mixts. 97780-06-8D, 101205-02-1D, mixts. 104206-82-8D, mixts. 105512-06-9D, mixts. with benzoylpyrazole 119126-15-7D, mixts. with benzoylpyrazole 120923-37-7D, mixts. with benzoylpyrazole 123343-16-8D, mixts.

126801-58-9D, mixts. 126535-15-7D, mixts. with benzoylpyrazole derivs. with benzoylpyrazole derivs. 128639-02-1D, mixts. with benzoylpyrazole 129630-19-9D, mixts. with benzoylpyrazole derivs. 131475-57-5D, mixts. with benzoylpyrazole derivs. 134605-64-4D, mixts. with benzoylpyrazole derivs. 136191-64-5D, mixts. with benzoylpyrazole 136849-15-5D, mixts. with benzoylpyrazole derivs. derivs. 138164-12-2D, mixts. with benzoylpyrazole derivs. 139528-85-1D, mixts. with benzoylpyrazole derivs. 141112-06-3D, mixts. with benzoylpyrazole 141112-29-0D, mixts. with benzoylpyrazole derivs. 141776-32-1D, mixts. with benzoylpyrazole derivs. 142459-58-3D, mixts. with benzoylpyrazole derivs. 142469-14-5D, mixts. with benzoylpyrazole 142891-20-1D, mixts. with benzoylpyrazole derivs. 145701-23-1D, mixts. with benzoylpyrazole derivs. 149979-41-9D, mixts. with benzoylpyrazole derivs. 153197-14-9D, mixts. with benzoylpyrazole 163515-14-8D, mixts. with benzoylpyrazole derivs. 168088-61-7D, mixts. with benzoylpyrazole derivs. 174514-07-9D, mixts. with benzoylpyrazole derivs. 181274-17-9D, mixts. with benzoylpyrazole 185119-76-0D, mixts. with benzoylpyrazole derivs. 188634-90-4D, mixts. with benzoylpyrazole derivs. 188735-26-4D, Fluorbentranil, mixts. with benzoylpyrazole derivs. 192708-91-1D, mixts. with benzoylpyrazole derivs. 211496-02-5D, mixts. with benzoylpyrazole derivs. (synergistic herbicides)

IT **252190-61-7**

CN

(synergistic herbicide)

RN 252190-61-7 USPATFULL

3-Pyridinecarboxamide, 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-, mixt. with [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1H-pyrazol-4-yl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 182060-80-6 CMF C16 H14 Cl N3 O4 S2

CM 2

CRN 111991-09-4 CMF C15 H18 N6 O6 S

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IT 252190-61-7 252190-66-2 (synergistic herbicide)
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ANSWER 2 OF 6 USPATFULL on STN
L17
       2003:74363 USPATFULL
ΑN
       Herbicidal mixtures having a synergistic effect
TI
       Sievernich, Bernd, Bohl-Iggelheim, GERMANY, FEDERAL REPUBLIC OF
IN
       Landes, Max, Gonnheim, GERMANY, FEDERAL REPUBLIC OF
       Kibler, Elmar, Hassloch, GERMANY, FEDERAL REPUBLIC OF
       von Deyn, Wolfgang, Neustadt, GERMANY, FEDERAL REPUBLIC OF
       Walter, Helmut, Obrigheim, GERMANY, FEDERAL REPUBLIC OF
       Otten, Martina, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF
       Westphalen, Karl-Otto, Speyer, GERMANY, FEDERAL REPUBLIC OF
       Vantieghem, Herve, Stutensee, GERMANY, FEDERAL REPUBLIC OF
       BASF Aktiengesellschaft, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF
PΑ
       (non-U.S. corporation)
PΙ
       US 6534444
                          B1
                               20030318
       WO 9965314 19991223
       US 2000-719429
                               20001212 (9)
AΤ
                               19990612
       WO 1999-EP4055
                           19980616
PRAI
       DE 1998-19826431
DT
       Utility
FS
       GRANTED
EXNAM Primary Examiner: Clardy, S. Mark
       Keil & Weinkauf
LREP
       Number of Claims: 29
CLMN
ECL
       Exemplary Claim: 1
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 2291
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A synergistic herbicidal mixture comprising
AB
       A) at least one benzoyl compound of formula I ##STR1##
```

or a salt thereof wherein

R.sup.1, R.sup.3 are hydrogen, halogen, alkyl, halogenalkyl, alkoxy, halogenalkoxy, alkylthio, alkylsulfinyl or alkylsulfonyl;

R.sup.2 is optionally substituted thiazol-2-yl, thiazol-4-yl, thiazol-5-yl, isoxazol-3-yl, isoxazol-4-yl, isoxazol-5-yl, 4,5-dihydroisoxazol-3-yl, 4,5-dihydroisoxazol-4-yl or 4,5-dihydroisoxazol-5-yl;

R.sup.4 is hydrogen, halogen or alkyl;

R.sup.5 is alkyl;

R.sup.6 is hydrogen or alkyl; and,

B) a synergistically effective amount of at least one further herbicidal compound as defined in the specification,

compositions comprising these mixtures, processes for the preparation of these compositions, and their use for controlling undesired plants.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL
      INCLM: 504/128.000
      INCLS: 504/132.000; 504/134.000; 504/136.000; 504/137.000; 504/139.000
NCL
      NCLM: 504/128.000
      NCLS: 504/132.000; 504/134.000; 504/136.000; 504/137.000; 504/139.000
IC
      [7]
      ICM: A01N043-56
      ICS: A01N043-78; A01N043-80
      504/128; 504/132; 504/134; 504/136; 504/137; 504/139
EXF
ARTU
                             COPYRIGHT 2004 ACS on STN
CHEMICAL ABSTRACTS INDEXING
                        PATENT
                                    KIND DATE
                   ______
     CA 132:20093 * WO 9965314 A1 19991223
os
* CA Indexing for this record included
     5-3 (Agrochemical Bioregulators)
     synergism herbicide benzoylpyrazole derivs mixt
ST
IT
     Herbicides
        (synergistic; compns. containing benzoylpyrazole derivs.)
                                252190-51-5 252190-52-6
                                                           252190-53-7
IT
     252190-49-1 252190-50-4
                                                           252190-58-2
                                252190-56-0
                                              252190-57-1
     252190-54-8
                   252190-55-9
                 252190-60-6 252190-61-7 252190-62-8
     252190-59-3
     252190-63-9
                 252190-64-0 252190-65-1 252190-66-2
     252190-67-3 252190-68-4 252190-69-5 252190-70-8
                                                           252190-71-9
                                              252190-75-3
                                                           252190-76-4
     252190-72-0 252190-73-1 252190-74-2
     252190-77-5 252190-78-6 252190-79-7 252190-80-0
                                                           252190-81-1
                 252190-83-3 252190-84-4 252190-85-5
                                                           252190-86-6
     252190-82-2
     252190-87-7 252190-88-8 252190-89-9 252190-90-2
                                                           252190-91-3
     252190-92-4 252190-93-5 252190-94-6 252190-95-7
                                                           252190-96-8
                 252190-98-0 252190-99-1 252191-00-7
                                                           252191-01-8
     252190-97-9
     252191-02-9
                   252191-03-0
        (synergistic herbicide)
      61-82-5D, 1H-1,2,4-Triazol-3-amine, mixts. with benzoylpyrazole derivs.
IT
      75-99-0D, mixts. with benzoylpyrazole derivs. 85-00-7D, mixts. with
                              88-85-7D, mixts. with benzoylpyrazole derivs.
     benzoylpyrazole derivs.
      93-65-2D, mixts. with benzoylpyrazole derivs. 93-71-0D, mixts. with
                              94-74-6D, mixts. with benzoylpyrazole derivs.
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      94-75-7D, mixts. with benzoylpyrazole derivs. 94-81-5D, mixts. with
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                              101-27-9D, mixts. with benzoylpyrazole derivs.
      benzoylpyrazole derivs.
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      122-42-9D, mixts. with benzoylpyrazole derivs. 123-33-1D, mixts. with
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      133-90-4D, mixts. with benzoylpyrazole derivs. 139-40-2D, mixts. with
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      150-68-5D, mixts. with benzoylpyrazole derivs. 314-40-9D, mixts. with
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330-55-2D, mixts. with benzoylpyrazole derivs. 534-52-1D, mixts. with

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24151-93-7D, mixts. with benzoylpyrazole derivs. 25057-89-0D, derivs. mixts. with benzoylpyrazole derivs. 26225-79-6D, mixts. with benzoylpyrazole derivs. 26259-45-0D, mixts. with benzoylpyrazole 26399-36-0D, mixts. with benzoylpyrazole derivs. 27314-13-2D, derivs. mixts. with benzoylpyrazole derivs. 28249-77-6D, mixts. with benzoylpyrazole derivs. 29091-05-2D, mixts. with benzoylpyrazole 29091-21-2D, mixts. with benzoylpyrazole derivs. 30043-49-3D, derivs. mixts. with benzoylpyrazole derivs. 30979-48-7D, mixts. with benzoylpyrazole derivs. 32889-48-8D, mixts. with benzoylpyrazole 33245-39-5D, mixts. with benzoylpyrazole derivs. 33629-47-9D, derivs. mixts. with benzoylpyrazole derivs. 33693-04-8D, mixts. with benzoylpyrazole derivs. 33820-53-0D, mixts. with benzoylpyrazole 34014-18-1D, mixts. with benzoylpyrazole derivs. 34123-59-6D, mixts. with benzoylpyrazole derivs. 34205-21-5D, mixts. with benzoylpyrazole derivs. 34256-82-1D, mixts. with benzoylpyrazole 34622-58-7D, mixts. with benzoylpyrazole derivs. 35597-43-4D, mixts. with benzoylpyrazole derivs. 36335-67-8D, mixts. with benzoylpyrazole derivs. 36756-79-3D, mixts. with benzoylpyrazole 38727-55-8D, 37924-13-3D, mixts. with benzoylpyrazole derivs. mixts. with benzoylpyrazole derivs. 39794-99-5D, mixts. with benzoylpyrazole derivs. 39807-15-3D, mixts. with benzoylpyrazole 40020-01-7 40487-42-1D, mixts. with benzoylpyrazole derivs. 41394-05-2D, mixts. with benzoylpyrazole derivs. 42089-03-2D, mixts. with benzoylpyrazole derivs. 42576-02-3D, mixts. with benzoylpyrazole 42609-52-9D, mixts. with benzoylpyrazole derivs. 42874-01-1D, mixts. with benzoylpyrazole derivs. 42874-03-3D, mixts. with benzoylpyrazole derivs. 43222-48-6D, mixts. with benzoylpyrazole 50563-36-5D, mixts. with benzoylpyrazole derivs. 50594-66-6D, mixts. with benzoylpyrazole derivs. 51218-45-2D, mixts. with benzoylpyrazole derivs. 51218-49-6D, mixts. with benzoylpyrazole 51235-04-2D, mixts. with benzoylpyrazole derivs. 51249-05-9D, mixts. with benzoylpyrazole derivs. 51338-27-3D, mixts. with benzoylpyrazole derivs. 52570-16-8D, mixts. with benzoylpyrazole derivs. 52756-22-6D, mixts. with benzoylpyrazole derivs. 52756-25-9D, mixts. with benzoylpyrazole derivs. 52888-80-9D, mixts. with benzoylpyrazole derivs. 53780-34-0D, mixts. with benzoylpyrazole 55283-68-6D, mixts. with benzoylpyrazole derivs. 55335-06-3D, mixts. with benzoylpyrazole derivs. 55511-98-3D, mixts. with benzoylpyrazole derivs. 55512-33-9D, mixts. with benzoylpyrazole 55634-91-8D, mixts. with benzoylpyrazole derivs. 55861-78-4D, derivs. mixts. with benzoylpyrazole derivs. 57375-63-0D, mixts. with benzoylpyrazole derivs. 58011-68-0D, mixts. with benzoylpyrazole 59682-52-9D, mixts. with benzoylpyrazole derivs. 59756-60-4D, mixts. with benzoylpyrazole derivs. 61213-25-0D, mixts. with benzoylpyrazole derivs. 61432-55-1D, mixts. with benzoylpyrazole 62476-59-9D, mixts. with benzoylpyrazole derivs. 63114-77-2D, mixts. with benzoylpyrazole derivs. 64249-01-0D, mixts. with 64529-56-2D, mixts. with benzoylpyrazole benzoylpyrazole derivs. 64902-72-3D, mixts. with benzoylpyrazole derivs. mixts. with benzoylpyrazole derivs. 66441-23-4D, mixts. with benzoylpyrazole derivs. 67129-08-2D, mixts. with benzoylpyrazole 68049-83-2D, mixts. with benzoylpyrazole derivs. 68505-69-1D, mixts. with benzoylpyrazole derivs. 68672-17-3D, mixts. with benzoylpyrazole derivs. 69377-81-7D, mixts. with benzoylpyrazole 69806-40-2D, mixts. with benzoylpyrazole derivs. 69806-50-4D, mixts. with benzoylpyrazole derivs. 71283-80-2D, mixts. with benzoylpyrazole derivs. 71561-11-0D, mixts. with benzoylpyrazole 72178-02-0D, mixts. with benzoylpyrazole derivs. 72619-32-0D, mixts. with benzoylpyrazole derivs. 73250-68-7D, mixts. with benzoylpyrazole derivs. 74051-80-2D, mixts. with benzoylpyrazole

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(synergistic herbicides)

TΤ

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(synergistic herbicides)

IT 252190-61-7

CN

(synergistic herbicide)

RN 252190-61-7 USPATFULL

3-Pyridinecarboxamide, 2-[[[[(4,6-dimethoxy-2pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-, mixt. with [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl](1-ethyl-5-hydroxy-1Hpyrazol-4-yl) methanone (9CI) (CA INDEX NAME)

CM 1

CRN 182060-80-6 CMF C16 H14 Cl N3 O4 S2

CM

CRN 111991-09-4 CMF C15 H18 N6 O6 S

IT 252190-61-7 252190-66-2 (synergistic herbicide)

L17 ANSWER 3 OF 6 USPATFULL on STN
AN 2003:33432 USPATFULL
TI Herbicidal mixture containing a 3-heterocyclyl-substituted benzoyl derivative and an adjuvant

IN Bratz, Matthias, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF Berghaus, Rainer, Speyer, GERMANY, FEDERAL REPUBLIC OF Otten, Martina, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Sievernich, Bernd, Bohl-Iggelheim, GERMANY, FEDERAL REPUBLIC OF Kibler, Elmar, Hassloch, GERMANY, FEDERAL REPUBLIC OF

Vantieghem, Herve, Stutensee, GERMANY, FEDERAL REPUBLIC OF

PA BASF Aktiengesellschaft, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 6514910 B1 20030204

WO 2000053014 20000914

AI US 2001-914873 20010905 (9) WO 2000-EP1641 20000228

PRAI DE 1999-19909833 19990305

DT Utility FS GRANTED

EXNAM Primary Examiner: Clardy, S. Mark

LREP Keil & Weinkauf CLMN Number of Claims: 18 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 550

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A herbicidal mixture, comprising

a) a herbicidally effective amount of a benzoyl compound of formula I
##STR1##

where:

R.sup.1, R.sup.2 are halogen, C.sub.1-C.sub.6-alkyl,
C.sub.1-C.sub.6-alkylthio, C.sub.1-C.sub.6-alkyl-sulfinyl or
C.sub.1-C.sub.6-alkylsulfonyl;

R.sup.3 is hydrogen, halogen, C.sub.1-C.sub.6-alkyl;

X is 4,5-dihydroisoxazolyl which is unsubstituted or mono- or polysubstituted by halogen, C.sub.1-C.sub.6-alkyl, C.sub.1-C.sub.4-alkoxy, C.sub.1-C.sub.4-haloalkyl, C.sub.1-C.sub.4-haloalkoxy, C.sub.1-C.sub.4-alkylthio;

R.sup.4 is a pyrazole of the formula II ##STR2##

which is attached in the 4-position and where

R.sup.5 is hydrogen,

R.sup.6 is methyl,

or an environmentally compatible salt thereof;

- b) an adjuvant comprising
- i) a C.sub.1-C.sub.5-alkyl C.sub.5-C.sub.22-alkanoate,
- ii) a C.sub.10-C.sub.20-carboxylic acid,
- iii) a partial phosphoric ester or a partial sulfuric ester of a monohydroxy-functional polyalkyl ether and
- iv) optionally an alkyl polyoxyalkylene polyether,

wherein the compound of formula I and the adjuvat are present in synergistically effective amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 504/139.000

INCLS: 504/266.000; 504/271.000

NCL NCLM: 504/139.000

NCLS: 504/266.000; 504/271.000

IC [7]

ICM: A01N043-78

ICS: A01N043-80; A01N025-30

EXF 504/139; 504/266; 504/271

ARTU 166

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2004 ACS on STN

PATENT KIND DATE

OS CA 133:218862 * WO 0053014 A1 20000914

* CA Indexing for this record included

CC 5-3 (Agrochemical Bioregulators)

ST herbicide benzoyl deriv activity enhancing adjuvant

IT Fatty acids, biological studies

(C10-20; activity-enhancing adjuvants for benzoyl derivative herbicide)

IT Alcohols, biological studies

(C9-11, ethoxylated; activity-enhancing adjuvant for benzoyl derivative herbicide)

IT Carboxylic acids, biological studies

(alkyl esters; activity-enhancing adjuvants for benzoyl derivative herbicide)

IT Herbicides

(compns. containing benzoyl derivative herbicides and activity-enhancing adjuvants)

IT Paraffin oils

(emulsifier-containing, Atplus; activity-enhancing adjuvant for benzoyl derivative herbicide)

IT 112-39-0, Methyl palmitate 112-62-9, Methyl oleate 112-80-1, Oleic
acid, biological studies 26183-52-8, Lutensol ON 110 80449-87-2,
Klearfac AA 270 107119-88-0, Lutensit A-EP 128088-09-5, Plurafac LF
700 201491-13-6, AG 6202

(activity-enhancing adjuvant for benzoyl derivative herbicide)

IT 182060-67-9 182060-76-0 210631-68-8

(herbicidal composition containing activity-enhancing adjuvant and)

ΙT 182060-67-9

(herbicidal composition containing activity-enhancing adjuvant and)

RN 182060-67-9 USPATFULL

Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-CN 1,3-dimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

IT 182060-67-9 182060-76-0

(herbicidal composition containing activity-enhancing adjuvant and)

L17 ANSWER 4 OF 6 USPATFULL on STN

2002:346987 USPATFULL AN

ΤI Benzylidenepyrazolones, their preparation and use

Rheinheimer, Joachim, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF IN Witschel, Matthias, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Engel, Stefan, Worrstadt, GERMANY, FEDERAL REPUBLIC OF Baumann, Ernst, Dudenhofen, GERMANY, FEDERAL REPUBLIC OF von Deyn, Wolfgang, Neustadt, GERMANY, FEDERAL REPUBLIC OF Hill, Regina Luise, Harthausen, GERMANY, FEDERAL REPUBLIC OF Mayer, Guido, Neustadt, GERMANY, FEDERAL REPUBLIC OF

Misslitz, Ulf, Neustadt, GERMANY, FEDERAL REPUBLIC OF Wagner, Oliver, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Otten, Martina, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Westphalen, Karl-Otto, Speyer, GERMANY, FEDERAL REPUBLIC OF Walter, Helmut, Obrigheim, GERMANY, FEDERAL REPUBLIC OF

BASF Aktiengesellschaft, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF PΑ

(non-U.S. corporation)

US 6500950 PΙ B1 20021231

US 2001-765626 20010122 (9) AΙ

Division of Ser. No. US 554184, now patented, Pat. No. US 6271179 RLI

19971121 DE 1997-19751722 PRAI

DTUtility

FS GRANTED

Primary Examiner: McKane, Joseph K.; Assistant Examiner: Saeed, Kamal EXNAM

Keil & Weinkauf LREP

Number of Claims: 15 CLMN Exemplary Claim: 1 ECL

0 Drawing Figure(s); 0 Drawing Page(s) DRWN

LN.CNT 1370

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Benzylidenepyrazolones of the formula I, ##STR1## AB

where the substituents and the index n have the following meanings:

R.sup.1 is unsubstituted or substituted C.sub.1-C.sub.6-alkyl;

R.sup.2 is unsubstituted or substituted C.sub.1-C.sub.6-alkyl, unsubstituted or substituted C.sub.1-C.sub.6-alkoxy, halogen, nitro, cyano;

R.sup.3 is hydrogen, halogen, nitro, cyano, a group NR.sup.5R.sup.6, OCOR.sup.5, NR.sup.5COR.sup.6, CO.sub.2R.sup.5, --COSR.sup.5, --CONR.sup.5R.sup.6, C.sub.1-C.sub.4-alkoxyiminoalkyl, C.sub.1-C.sub.6-alkylcarbonyl, unsubstituted or substituted C.sub.1-C.sub.6-alkyl, unsubstituted or substituted C.sub.1-C.sub.6-alkylthio, unsubstituted or substituted C.sub.1-C.sub.6-alkylthio, unsubstituted or substituted C.sub.2-C.sub.6-alkenyl, unsubstituted or substituted or subs

R.sup.4 is C.sub.1-C.sub.6-alkyl, C.sub.1-C.sub.4-haloalkyl;

R.sup.3 and R.sup.4 form an optionally substituted saturated or unsaturated 2- or 3-membered bridge which may contain a sulfur atom which may be oxidized to the sulfoxide or sulfone;

R.sup.5 is hydrogen or unsubstituted or substituted C.sub.1-C.sub.6-alkyl;

R.sup.6 is unsubstituted or substituted C.sub.1-C.sub.6-alkyl;

R.sup.7 is hydrogen, C.sub.1-C.sub.6-alkyl or C.sub.1-C.sub.4-haloalkyl;

n is 0,1 or 2,

X is hydrogen, chlorine or bromine;

where the compounds claimed may be present both in the trans and in the cis form or as a mixture of these isomers, are described.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

INCL INCLM: 544/140.000

INCLS: 544/238.000; 544/335.000; 546/211.000; 546/275.400; 548/128.000; 548/131.000; 548/143.000; 548/204.000; 548/235.000; 548/266.500; 548/376.100

NCL NCLM: 544/140.000

NCLS: 544/238.000; 544/335.000; 546/211.000; 546/275.400; 548/128.000; 548/131.000; 548/143.000; 548/204.000; 548/235.000; 548/266.200; 548/376.100

IC [7]

ICM: C07D413-10

EXF 544/140; 544/238; 544/335; 546/211; 546/275.4; 548/128; 548/131; 548/143; 548/204; 548/235; 548/266.5; 548/376.1

ARTU 166

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2004 ACS on STN

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PATENT KIND DATE
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OS CA 131:5255 * WO 9926930 A2 19990603

* CA Indexing for this record included

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 5

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ST
     benzylidenepyrazolone prepn herbicide; pyrazolone benzylidene prepn
     herbicide; chlorodihydroisoxazolylmethylsulfonylphenylmethylenemethyldihy
     dropyrazolone prepn herbicide
IT
     Herbicides
        (preparation of benzylidenepyrazolones as herbicides)
      225648-12-4P 225648-23-7P 225648-30-6P
IT
                                                   225648-36-2P
                                                                  225648-42-0P
      225648-48-6P 225648-54-4P
        (preparation of benzylidenepyrazolones as herbicides)
IT
      210576-74-2
        (preparation of benzylidenepyrazolones as herbicides)
   225648-48-6P
TТ
        (preparation of benzylidenepyrazolones as herbicides)
    225648-48-6 USPATFULL
RN
    Methanone, (5-chloro-1-methyl-1H-pyrazol-4-yl)[2-chloro-4-(methylsulfonyl)-
CN
       3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)
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IT 225648-48-6P 225648-54-4P

(preparation of benzylidenepyrazolones as herbicides)

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ANSWER 5 OF 6 USPATFULL on STN
L17
       2001:125945 USPATFULL
AN
       Benzylidene pyrazolones, production and use thereof
TI
       Rheinheimer, Joachim, Ludwigshafen, Germany, Federal Republic of
IN
       Witschel, Matthias, Ludwigshafen, Germany, Federal Republic of
       Engel, Stefan, Worrstadt, Germany, Federal Republic of
       Baumann, Ernst, Dudenhofen, Germany, Federal Republic of
       von Deyn, Wolfgang, Neustadt, Germany, Federal Republic of
       Hill, Regina Luise, Harthausen, Germany, Federal Republic of
       Mayer, Guido, Neustadt, Germany, Federal Republic of
       Misslitz, Ulf, Neustadt, Germany, Federal Republic of
       Wagner, Oliver, Ludwigshafen, Germany, Federal Republic of
       Otten, Martina, Ludwigshafen, Germany, Federal Republic of
       Westphalen, Karl-Otto, Speyer, Germany, Federal Republic of
       Walter, Helmut, Obrigheim, Germany, Federal Republic of
       BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of
PΑ
       (non-U.S. corporation)
PΙ
       US 6271179
                          B1
                               20010807
       WO 9926930 19990603
       US 2000-554184
                               20000511 (9)
ΑI
       WO 1998-EP7099
                               19981121
                               20000511 PCT 371 date
                               20000511 PCT 102(e) date
       DE 1997-19751722
PRAI
                           19971121
       Utility
DT
       GRANTED
FS
       Primary Examiner: Ramsuer, Robert W.
EXNAM
LREP
       Keil & Weinkauf
       Number of Claims: 21
CLMN
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Exemplary Claim: 1
ECL
       No Drawings
DRWN
LN.CNT 1739
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Benzylidenepyrazolones of the formula I, ##STR1##
AB
       Useful as herbicides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL
       INCLM: 504/282.000
       INCLS: 544/140.000; 544/182.000; 544/216.000; 544/238.000; 544/333.000;
              544/405.000; 546/211.000; 546/276.100; 548/204.000; 548/236.000;
              548/240.000; 548/247.000; 548/265.800; 548/312.400; 548/364.100;
              548/365.100; 548/365.700; 548/366.100
NCL
              504/282.000
              544/140.000; 544/182.000; 544/216.000; 544/238.000; 544/333.000;
       NCLS:
              544/405.000; 546/211.000; 546/276.100; 548/204.000; 548/236.000;
              548/240.000; 548/247.000; 548/265.800; 548/312.400; 548/364.100;
              548/365.100; 548/365.700; 548/366.100
IC
       [7]
       ICM: A01N043-56
       ICS: C07D231-20
EXF
       548/240; 548/366.1; 504/282
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CHEMICAL ABSTRACTS INDEXING
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                         PATENT
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                                            DATE
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      CA 131:5255 * WO
                              9926930 A2 19990603
OS
* CA Indexing for this record included
      28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
       Section cross-reference(s): 5
ST
      benzylidenepyrazolone prepn herbicide; pyrazolone benzylidene prepn
      herbicide; chlorodihydroisoxazolylmethylsulfonylphenylmethylenemethyldihy
      dropyrazolone prepn herbicide
TΤ
      Herbicides
        (preparation of benzylidenepyrazolones as herbicides)
IT
      225648-12-4P 225648-23-7P
                                   225648-30-6P 225648-36-2P
                                                                 225648-42-0P
      225648-48-6P 225648-54-4P
        (preparation of benzylidenepyrazolones as herbicides)
IT
      210576-74-2
        (preparation of benzylidenepyrazolones as herbicides)
IT
    225648-48-6P
        (preparation of benzylidenepyrazolones as herbicides)
RN
     225648-48-6 USPATFULL
     Methanone, (5-chloro-1-methyl-1H-pyrazol-4-yl)[2-chloro-4-(methylsulfonyl)-
CN
       3-(2-thiazolyl)phenyl]- (9CI) (CA INDEX NAME)
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ΙT
     225648-48-6P 225648-54-4P
        (preparation of benzylidenepyrazolones as herbicides)
    ANSWER 6 OF 6 USPATFULL on STN
L17
       1998:154216 USPATFULL
AN
       Herbicidally active pyrazol-4-ylbenzoyl compounds
ΤI
       von Deyn, Wolfgang, Neustadt, Germany, Federal Republic of
TN
       Hill, Regina Luise, Speyer, Germany, Federal Republic of
       Kardorff, Uwe, Mannheim, Germany, Federal Republic of
       Engel, Stefan, Idstein, Germany, Federal Republic of
       Otten, Martina, Ludwigshafen, Germany, Federal Republic of
       Vossen, Marcus, Mannheim, Germany, Federal Republic of
       Plath, Peter, Frankenthal, Germany, Federal Republic of
       Rang, Harald, Altrip, Germany, Federal Republic of
       Harreus, Albrecht, Ludwigshafen, Germany, Federal Republic of
       Konig, Hartmann, Heidelberg, Germany, Federal Republic of
       Walter, Helmut, Obrigheim, Germany, Federal Republic of
       Westphalen, Karl-Otto, Speyer, Germany, Federal Republic of
       Misslizt, Ulf, Neustadt, Germany, Federal Republic of
       BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of
PΑ
       (non-U.S. corporation)
                               19981208
PΙ
       US 5846907
       WO 9626206 19960829
       US 1997-875664
                               19970730 (8)
ΑI
       WO 1996-EP635
                               19960214
                               19970730 PCT 371 date
                               19970730 PCT 102(e) date
       DE 1995-19506572
PRAI
                           19950224
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Higel, Floyd D.
LREP
       Keil & Weinkauf
       Number of Claims: 8
CLMN
ECL
       Exemplary Claim: 1,7
DRWN
       No Drawings
LN.CNT 1743
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Pyrazol-4-ylbenzoyl compounds of the formula I ##STR1## where Z is a 5-
AB
       or 6-membered heterocyclic saturated or unsaturated radical, Q is a
       pyrazole ring and L and M are as defined in the specification, their use
       as herbicidal compounds and to processes for preparing the compounds.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL
       INCLM: 504/221.000
       INCLS: 564/234.000; 564/242.000; 564/244.000; 564/261.000; 564/263.000;
              564/265.000; 564/266.000; 564/270.000; 564/271.000; 564/274.000;
              564/283.000; 564/288.000; 564/289.000; 564/290.000; 564/291.000;
              564/294.000; 564/295.000; 544/053.000; 544/318.000; 544/335.000;
              546/174.000; 546/330.000; 548/128.000; 548/131.000; 548/136.000;
              548/141.000; 548/143.000; 548/204.000; 548/214.000; 548/236.000;
              548/247.000; 548/267.400; 548/370.100; 548/550.000; 548/551.000;
              548/364.100; 548/364.700; 548/365.700; 549/038.000; 549/039.000;
              549/077.000; 549/450.000; 549/451.000; 558/405.000
NCL
       NCLM:
              504/221.000
              504/234.000; 504/242.000; 504/244.000; 504/261.000; 504/263.000;
       NCLS:
              504/265.000; 504/266.000; 504/270.000; 504/271.000; 504/274.000;
              504/283.000; 504/288.000; 504/289.000; 504/290.000; 504/291.000;
              504/294.000; 504/295.000; 544/053.000; 544/318.000; 544/335.000;
              546/174.000; 546/330.000; 548/128.000; 548/131.000; 548/136.000;
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548/141.000; 548/143.000; 548/204.000; 548/214.000; 548/236.000;
              548/247.000; 548/267.400; 548/364.100; 548/364.700; 548/365.700;
              548/370.100; 548/550.000; 548/551.000; 549/038.000; 549/039.000;
              549/077.000; 549/450.000; 549/451.000; 558/405.000
IC
       [6]
       ICM: A01N043-76
       ICS: A01N043-80; C07D261-10; C07D263-30; C07D277-22; C07D307-38;
       C07D521-00
EXF
       548/364.1; 548/365; 548/7; 548/128; 548/131; 548/136; 548/141; 548/143;
       548/204; 548/214; 548/236; 548/247; 548/267.4; 548/370.1; 548/364.7;
       548/365.1; 548/550; 548/551; 549/38; 549/39; 549/77; 549/450; 549/451;
       558/405; 504/234; 504/242; 504/244; 504/261; 504/263; 504/265; 504/266;
       504/270; 504/271; 504/274; 504/283; 504/288; 504/289; 504/290; 504/291;
       504/294; 504/295; 544/53; 544/318; 544/335; 546/174; 546/330
ARTU
CHEMICAL ABSTRACTS INDEXING
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                                      KIND
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      CA 125:247812 * WO
                              9626206 A1 19960829
* CA Indexing for this record included
CC
      28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
       Section cross-reference(s): 5
ST
      benzoylpyrazole prepn herbicide
IT
      Herbicides
        (4-benzoylpyrazoles)
                                                                  182060-59-9P
IT
      182060-43-1P 182060-47-5P
                                    182060-50-0P
                                                   182060-55-5P
      182060-63-5P 182060-67-9P 182060-71-5P 182060-76-0P
      182060-80-6P
        (preparation of 4-benzoylpyrazoles as herbicides)
TΤ
      151-00-8, Isobutyraldehyde oxime 5203-77-0, 1,3-Dimethyl-5-
      hydroxypyrazole
                        82961-52-2
                                   105917-80-4
                                                   121359-48-6,
                                    182003-84-5
      2-(Tributylstannyl)thiazole
                                                  182061-44-5
        (preparation of 4-benzoylpyrazoles as herbicides)
                                                                  181997-72-8P
IT
      106904-09-0P
                    120100-04-1P
                                    120100-44-9P
                                                   181997-71-7P
      181997-73-9P
                    181997-74-0P
                                    181997-75-1P
                                                   181997-76-2P
                                                                  181997-77-3P
      181997-78-4P
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                                    181997-80-8P
                                                   181997-81-9P
                                                                  181997-82-0P
      181997-83-1P
                    181997-84-2P
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                                                   181997-86-4P
                                                                  181997-87-5P
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                                    181997-90-0P
                                                   181997-91-1P
                                                                  181997-92-2P
                                    181997-95-5P
                                                   181997-96-6P
                                                                  181997-97-7P
      181997-93-3P
                    181997-94-4P
                                    181998-00-5P
                                                   181998-01-6P
                                                                  181998-02-7P
      181997-98-8P
                    181997-99-9P
        (preparation of 4-benzoylpyrazoles as herbicides)
IT
   182060-67-9P
        (preparation of 4-benzoylpyrazoles as herbicides)
RN
     182060-67-9 USPATFULL
     Methanone, [2-chloro-4-(methylsulfonyl)-3-(2-thiazolyl)phenyl] (5-hydroxy-
CN
       1,3-dimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)
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IT 182060-67-9P 182060-76-0P 182060-80-6P (preparation of 4-benzoylpyrazoles as herbicides)

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